



SACRAMENTO - SAN JOAQUIN

**DELTA** CONSERVANCY



# 2012 Strategic Plan



## 2011–2012

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## THE DELTA AND SUISUN MARSH

The Sacramento-San Joaquin Delta is at the confluence of the Sacramento River and San Joaquin River basins. This confluence is unique because the two river deltas merge into an inland delta. The Delta is the largest estuary on the west coast of North and South Americas, and is a unique natural resource of local, state, and national significance.

The Suisun Marsh is the largest contiguous brackish water marsh remaining on the west coast of North America and is a critical part of the San Francisco Bay and Sacramento-San Joaquin River Delta estuary ecosystem. The Marsh encompasses more than 10 percent of California's remaining natural wetlands.

The Delta is a significant agricultural resource. The Delta and Suisun Marsh, part of the Pacific Flyway, also offer numerous opportunities for recreation, such as boating, fishing, hiking, birding, and hunting.

# The Delta and Suisun Marsh



# Executive Summary

The Sacramento-San Joaquin Delta Conservancy (the “Delta Conservancy” or “Conservancy”) is California’s newest conservancy, created by the Legislature as part of comprehensive Delta-focused legislation in November 2009. California’s conservancies are homegrown institutions created to carry out a dedicated mission of enhancement for major regional landscapes. They are able to act flexibly, in coordination with private businesses and not-for-profit organizations, while advancing the public good as a governmental entity.

The Delta Conservancy’s service area is the statutory Delta and Suisun Marsh, which encompasses parts of six counties and approximately 1,300 square miles, including some 1,000 miles of levees and waterways. This area includes an irreplaceable ecosystem and a robust economy and culture that revolve around agriculture.

## Ecosystem

The Delta ecosystem is home to more than 55 species of fish and 750 species of plants, and provides irreplaceable habitat for numerous species of migratory birds. Despite its richness the Delta ecosystem has been described as one of the most fragile in the United States. It is beset by serious problems: rapid declines in fish populations, large numbers of aggressive invasive species, poor water quality, extensive fresh water diversions, disconnection of floodplains and wetlands from necessary water flows, and cumulative loss of habitat for nearly all life stages of fish, bird, and wildlife species. Restoration of this ecosystem will require not only physical habitat reconstruction across the several habitat types mentioned above but also active and sophisticated management of water flows and other ecosystem processes.

## Economy

Approximately 500,000 acres of highly productive agricultural lands provide the economic base and primary land use in the Delta. Agriculture encompasses livestock, specialty crops such as asparagus, pears, and wine grapes, and various table vegetables and feed crops. Agriculture is by far the largest portion of a \$3 billion Delta regional economy that also includes recreation and tourism. The Delta is also traversed by energy, communications and transportation facilities vital to the economic health of the state.

## People and Culture

There is a rich cultural heritage in the Delta. It is home to several historically significant legacy communities, including Bethel Island, Clarksburg, Courtland, Freeport, Hood, Isleton, Knightsen, Locke, Rio Vista, Ryde, and Walnut Grove. Locke, the largest remaining town built by early Chinese immigrants to the United States, is a National Historic Landmark District.





### The Delta Conservancy's Legislation

The Legislature created the Conservancy to act as a primary state agency to implement ecosystem restoration in the Delta and support efforts that advance environmental protection and the economic well being of Delta residents. The Legislature directed that the Conservancy work in collaboration and cooperation with local governments and interested parties and provided examples of activities to be supported, including:

- Protecting and enhancing habitat and habitat restoration; assisting local entities in the implementation of their habitat conservation plans (HCPs) and natural community conservation plans (NCCPs); facilitating “take” protection and safe harbor agreements for adjacent landowners and local public agencies; and promoting environmental education through grant funding;<sup>1</sup>

- Protecting and preserving Delta agriculture and working landscapes; increasing the resilience of the Delta to the effects of natural disasters such as floods and earthquakes; and protecting and improving water quality; and
- Providing increased opportunities for tourism and recreation in the Delta; assisting the Delta regional economy; and promoting Delta legacy communities and economic vitality in the Delta.

### Mission and Governance

The Conservancy's Mission Statement is:

Working collaboratively and in coordination with local communities, the Conservancy will lead efforts to protect, enhance, and restore the Delta's economy, agriculture and working landscapes, and environment, for the benefit of the Delta region, its local communities, and the citizens of California.

The Conservancy is governed by a 23-member Board, including eleven voting members, two non-voting members, and ten liaison advisors. The Board's chair is selected from among the five Delta county representatives, all of whom are voting members.<sup>2</sup>

The Delta Conservancy has authority to own or manage land—but not to exercise eminent domain. It may distribute grants and partner with non-governmental organizations in pursuit of its mission, similar to many other California conservancies. Nearly all conservancies have the powers to acquire, exchange, and improve land from willing sellers, but the Delta Conservancy is uniquely required to “use conservation easements to accomplish ecosystem restoration whenever feasible.” The Delta Conservancy is also the only state conservancy explicitly empowered to acquire water rights and “take or fund action” outside of the formal boundaries of its region subject to certain conditions.

### Strategic Plan Structure

There are three key parts to the Strategic Plan: Priorities and Criteria; Goals, Objectives, and Strategies; and Implementation Scenarios. Each of these is summarized below.

#### *Priorities and Criteria*

The Legislature specified that the Conservancy's Strategic Plan establish priorities and criteria for projects and programs. This Strategic Plan includes initial priorities and criteria that are responsive to the Legislature's direction, including the Conservancy's ongoing assessment of requirements, capabilities, and funding needs. They reflect the reality of the Conservancy's current scenario (see Section VII) and allow for future refinement in response to changed circumstances.

**Priorities.** In the current situation, where the Conservancy has limited funding and the planning context is uncertain, the Conservancy's priorities are:

- Identifying potential opportunities to advance the Conservancy's mission that do not require additional Conservancy funding and match existing organizational resources. This would include convening a voluntary Restoration Network to coordinate and integrate early restoration in the Delta, and exploring a collaborative Delta Branding effort
- Forging key relationships with other local, state, and federal agencies, non-public organizations, and key stakeholders, and education across the Delta about the Conservancy's roles
- Developing organizational capacity and funding sources

The Conservancy will use information gathered through its ongoing assessment, including its own Finance Plan, to identify future priorities for programs and funding. These will become relevant as the Conservancy transitions into other scenarios.

**Criteria.** The Conservancy will develop funding criteria to support future grant making in a manner consistent with legal and other requirements. Because of the legal and regulatory aspects of grant making the Strategic Plan is not the appropriate vehicle for such an effort. These criteria, once developed, will ensure that the Conservancy is prepared to fulfill the Legislature's intent as funding becomes available to support its co-equal responsibilities.



The five criteria described below reflect the Conservancy's mandates and authorities as well as input gathered through interviews and public meetings as part of the process of preparing this Strategic Plan. They are consistent with the Conservancy's assessment process described above. The Conservancy anticipates that these criteria will be refined, and new criteria developed, in the context of specific future Conservancy projects.

**Balance.** The Conservancy will develop and implement its program through a balanced approach to distributing costs and benefits between its co-equal responsibilities consistent with its priorities.

**Multiple Benefits.** The Conservancy will actively look for opportunities to meet its co-equal responsibilities by identifying and providing multiple benefits and will encourage its partners and collaborators to do the same.

**Ecosystem Restoration and Economic Development Models.** The Conservancy will encourage the use of existing and new models to support decision-making. In its role as a primary state agency to implement ecosystem restoration in the Delta, the Conservancy anticipates using models, such as the California Department of Fish and Game's Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) conceptual models, as it makes choices about participating in, supporting, managing, or leading specific restoration activities or programs developed outside the Conservancy. In carrying out its economic development role the Conservancy anticipates using models as it make choices about participating in, supporting, managing, or leading specific development activities or programs developed outside the Conservancy.

**Mitigation of Impacts.** The Conservancy will be sensitive to impacts, both direct and indirect, of its programs.

**Climate Change.** The Conservancy's climate change policy, adopted by the Board, will serve as an important touchstone for decision-making.

### Goals, Objectives, and Strategies

Section VI presents the Goals, Objectives, and Strategies that are the heart of this plan. Six goals describe the Conservancy's range of activities both now and in the foreseeable future. The first four goals address substantive program priorities; the latter two goals address organizational and funding priorities. The order of goals is not intended as a sequence of Conservancy priorities. The six goals are:

**Goal:** Establish the Conservancy as a valuable partner with Delta growers, agriculture-related businesses, and residents in protecting and enhancing the Delta's agricultural and working landscapes and sense of place

**Goal:** Lead economic enhancement activities that support the Delta ecosystem and economy

**Goal:** Lead efforts in protecting, enhancing and restoring the Delta ecosystem in coordination with other governmental and non-governmental entities and citizens in the Delta

**Goal:** Establish the Conservancy as a leader in gathering and communicating scientific and practical information about the Delta ecosystem and economy

**Goal:** Create an effective organization based on principles of community service, collaboration, coordination, appropriate transparency, and efficient use of resources to fulfill the Conservancy's mission and deliver its programs

**Goal:** Establish a stable, diversified, and self-sustaining funding base for the Conservancy



For each goal the plan identifies multiple objectives: these are more focused, actionable and in some cases measurable components of the goals. One or more strategies are associated with each objective. These are potential actions that the Conservancy may undertake to achieve its objectives and goals. The goals, objectives and strategies are intended to cover the range of responsibilities and authorities that the Legislature articulated for the Conservancy in its enabling legislation. They are presented as a suite of linked choices for the Conservancy that will be shaped primarily by two factors: funding and the status of key plans such as the Delta Plan and the Bay Delta Conservation Plan. The Conservancy will not pursue every goal, objective, or strategy presented in this plan at the same time or with the same level of resources, but will match its choices to circumstances and opportunities.

### *Implementation Scenarios*

The Delta Conservancy must develop and implement its programs for ecosystem restoration and economic well being within a complex context that requires “consistency” with five other plans and laws, including the Delta Plan under development by the Delta Stewardship Council. The Conservancy’s planning context also includes ongoing city and county planning activities; the Delta Protection Commission’s Economic Sustainability Plan for the Sacramento-San Joaquin Delta; and proposals for economic enhancement developed by private and non-governmental organizations such as the Discover the Delta Foundation.



The need to establish a stable funding base for the Conservancy's activities is a major priority of this Strategic Plan. The Delta Conservancy is unique in that it was not established concurrent with bond funding. It is unclear when or whether a long-anticipated bond measure to finance water and ecosystem improvements statewide, including significant potential financing for the Delta Conservancy, will be put before voters. Other funding sources that could prove important to the Conservancy's near-term future include allocations from existing bond funds, appropriations from the state general fund, carbon offsets that would allow carbon emitters to pay Delta landowners for carbon sequestration activities under AB 32's implementation mechanisms, dedicated revenue streams from state government such as a license plate fund, foundation programs, or revenue-generating partnerships with major private or non-profit entities.

This initial Strategic Plan is intended to support decision-making in four scenarios:

- Low funding and related plans incomplete or not enforceable—the current scenario
- Low funding and related plans complete and enforceable
- High funding and related plans incomplete or not enforceable
- High funding and related plans complete and enforceable

### Strategic Plan Development Process

This Strategic Plan has been developed through a process that reflects the Conservancy's commitment to collaboration, consultation, and transparency. In Phase I the Strategic Plan team consulted widely with members of the Conservancy Board and the Conservancy's Strategic Plan and Policy Subcommittee; key Delta stakeholder organizations in agriculture and other sectors; and local government officials and staff including county agriculture commissioners. In Phase II the Strategic Plan team organized and conducted five public input meetings, one in each of the five Delta counties. These public meetings occurred during January-February 2012. In Phase III a preliminary Draft Strategic Plan was prepared with input from the Subcommittee and posted on the Conservancy's web page for public comment from March 26 to April 20. The Strategic Plan team conducted three public work sessions for discussion of the public draft plan in Rio Vista (April 10), Clarksburg (April 12), and Oakley (April 14) that were attended by at least one Conservancy Board member. Conservancy staff also made presentations about the draft public plan at supervisor meetings in all five Delta counties, and conducted follow up discussions with key Delta stakeholder organizations. In Phase IV this Strategic Plan was presented to the Conservancy's Board for deliberation on May 16, 2012, revised in response to Board and other input, and considered for adoption on June 27, 2012.

A copy of this Strategic Plan and other related information can be found at the Conservancy's website: <http://www.deltaconservancy.ca.gov>. A CD or printed copy may be requested by contacting the Conservancy at (916) 375-2084. Hard copies are available at the Conservancy's offices at 1450 Halyard Drive, Suite 6, West Sacramento 95691.



# Table of Contents

I. Introduction.....	9
II. About the Sacramento–San Joaquin Delta and the Conservancy.....	11
III. Context for the Strategic Plan.....	17
IV. Strategic Plan Development.....	25
V. Priorities and Criteria.....	29
VI. Goals and Objectives.....	33
VII. Implementing the Strategic Plan .....	55
VIII. Next Steps .....	61
Glossary .....	62
Appendix A: Sacramento-San Joaquin Delta Conservancy Organizational Chart .....	64
Appendix B: Sacramento-San Joaquin Delta Conservancy Act .....	65
Appendix C: Sacramento-San Joaquin Delta Conservancy Climate Change Policy .....	71
Acronyms and References .....	80
Appendix D: Input for Strategic Plan Development .....	82
Figure 1: Sacramento-San Joaquin Delta Conservancy Service Area Map.....	10
Figure 2: Roles and Relationships of Three Delta-focused State Agencies.....	18
Figure 3: Four Potential Roles of the Delta Conservancy.....	56
Endnotes .....	83







# I. Introduction

The regional landscapes of California are famous the world over. Our coast, mountains, foothills and agricultural valleys have been embraced as vibrant, unique parts of America, worthy of investment, protection and celebration.

The Sacramento-San Joaquin Delta (the “Delta”) is now taking its rightful place as one of those unique regions. The confluence of the Sacramento and San Joaquin Rivers and the heart of the Great Central Valley, the Delta is the largest estuary on the west coast of the Americas and an agricultural and cultural landscape of national significance. The Delta is a major stopover on the Pacific Flyway and includes the Suisun Marsh, the largest contiguous brackish water marsh remaining on the west coast of the United States. It also offers unsurpassed opportunities for outdoor recreation such as boating, fishing, hunting, and birding.

California has created a homegrown institution—the state conservancy—to carry out a dedicated mission of regional enhancement for its major regional landscapes. Conservancies are able to act flexibly, in coordination with private businesses and not-for-profit organizations, while advancing the public good as a governmental entity. They work at the intersection of markets and governance to protect and enhance the economy, environment, and cultural heritage of California’s regions. There are currently 10 state conservancies, with the Sacramento-San Joaquin Delta Conservancy (the “Delta Conservancy” or the “Conservancy”) being the newest.

The Delta Conservancy’s Mission, described below in detail, is critically important. The Delta ecosystem retains tremendous assets as home to more than 55

species of fish and 750 species of plants, and it provides irreplaceable habitat for numerous species of migratory birds. Nevertheless, certain parts of the Delta ecosystem are in serious decline. The Delta economy is based on almost 500,000 acres of highly productive agricultural soils but this economy also faces significant challenges. The Delta Conservancy must address these challenges in collaboration with a wide range of stakeholders; this Strategic Plan will serve as a resource for the Conservancy’s Board and staff in this effort.

This Strategic Plan is organized into seven additional sections:

**Section II:** a detailed discussion of the Conservancy’s legislation and organization

**Section III:** an overview of the complex planning and funding context that shapes this Strategic Plan

**Section IV:** a description of the process for developing this Strategic Plan

**Section V:** a summary of Priorities and Criteria for the Conservancy

**Section VI:** descriptions of the Conservancy’s Goals, Objectives, and Strategies

**Section VII:** an overview of how the Conservancy will implement this Strategic Plan

**Section VIII:** next steps in implementing the Strategic Plan



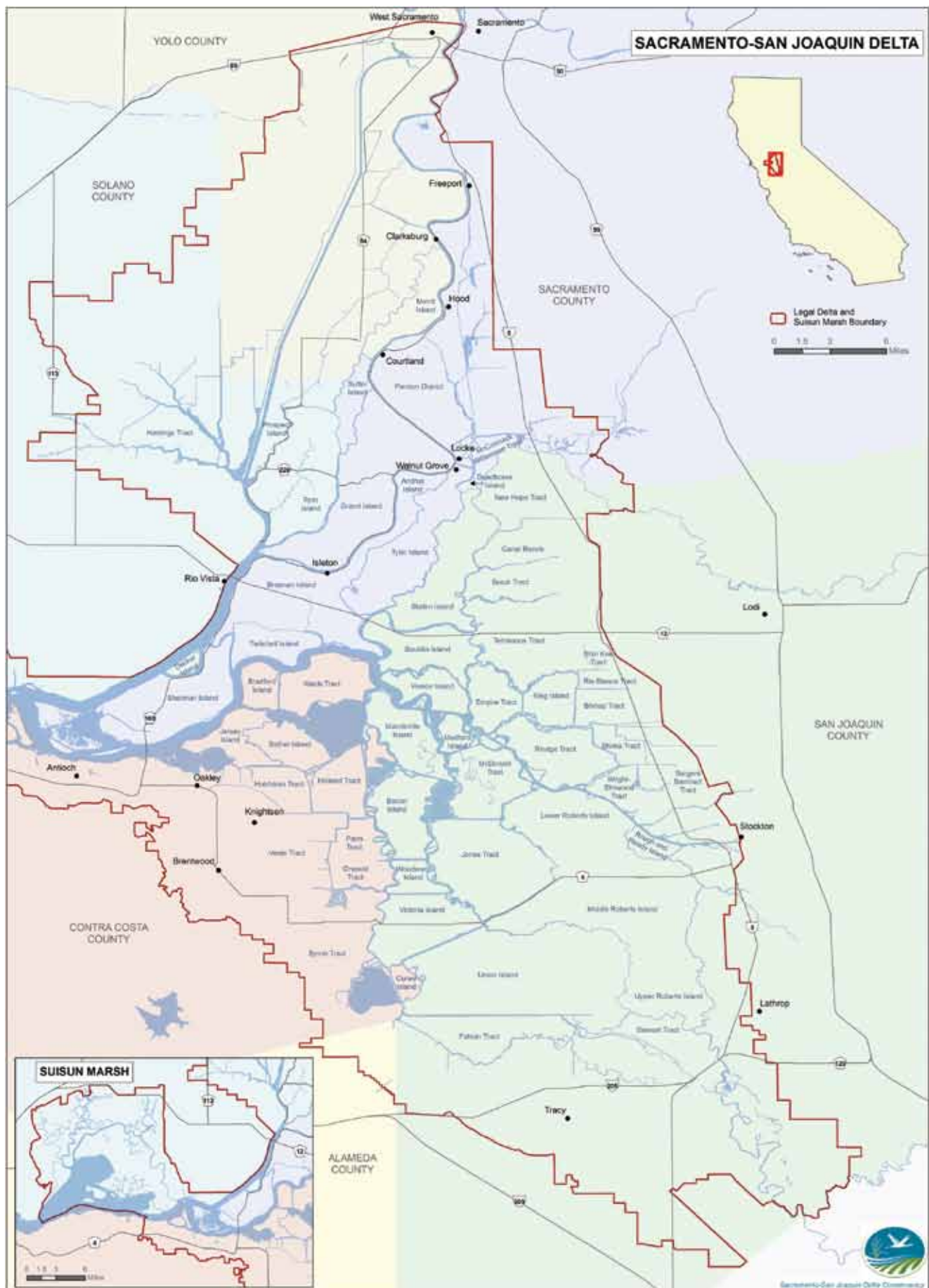


Figure 1: Sacramento-San Joaquin Delta Conservancy Service Area Map





## II. About the Sacramento – San Joaquin Delta and the Conservancy

The Conservancy's service area is the statutory Delta (see Water Code §12220) and Suisun Marsh, containing approximately 1,300 square miles and more than 1,000 miles of levees and waterways.<sup>3</sup> This service area covers parts of six counties: Contra Costa, Sacramento, San Joaquin, Solano, and Yolo (collectively known as the "Delta counties"), as well as a very small part of Alameda. Within this area are an irreplaceable ecosystem and a robust economy and a local culture that revolve around agriculture.

The Delta ecosystem is the lower drainage area of the vast Central Valley of California. It is inextricably linked to the Sacramento and San Joaquin River watersheds as a recipient of flows and constituents from natural and man-caused activities and events upstream. It is distinguished by various aquatic ecosystems that host numerous rare native fish, and by several distinct terrestrial and wetland habitats that support abundant bird and animal life. These key habitats include tidal marshes, managed freshwater wetlands, in-channel fresh and brackish water habitats, open water habitats, seasonal wetlands, riparian forest, and grasslands, among others. In all of these habitats there exist both resident and migratory species of great conservation value. This means that Delta ecosystem management must consider not only localized contexts but also the way that Delta habitats fit within regional, watershed, and even continental-scale ecosystems.

Despite this richness, the Delta ecosystem has been described as one of the most fragile in the United States. It is beset by serious problems, including rapid declines

in native fish populations, large numbers of aggressive invasive species, highly variable water quality, extensive fresh water diversions, disconnection of floodplains and wetlands from necessary water flows, and cumulative loss of habitat for nearly all life stages of native fish, bird, and wildlife species. Restoration of this ecosystem will require not only physical habitat reconstruction across the habitat types mentioned above, but also active and sophisticated management of water flows, water quality constituents, and ecosystem processes.

The economic base and primary land use in the Delta is agriculture. Delta lands are highly productive, and the Delta counties and the Delta Protection Commission's *Land Use and Resource Management Plan for the Primary Zone of the Delta* (RMP) have delineated Delta lands for long-term agricultural use.<sup>4</sup> These uses have historically included specialty crops as varied as asparagus, pears, and wine grapes, along with a wide variety of table vegetables, feed crops and livestock. Agriculture is the



largest portion of a \$3 billion Delta regional economy that also includes recreation and tourism.<sup>5</sup> The Delta is also traversed by energy, communications and transportation facilities vital to the economic health of the state.

Importantly, some Delta agricultural lands also provide rich seasonal wildlife habitat. Thousands of acres are shallowly flooded after harvest and provide feeding and resting areas for resident and migratory birds and other wildlife. This practice of seasonal flooding is one example of a management practice that supports both the Delta ecosystem and the economy.

There is also a rich cultural heritage in the Delta. It is home to several historically significant legacy communities, including Bethel Island, Clarksburg, Courtland, Freeport, Hood, Isleton, Knightsen, Locke, Rio Vista, Ryde, and Walnut Grove. Locke, the largest remaining town built by early Chinese immigrants to the United States, is a National Historic Landmark District. This heritage lives on in the continued innovation and vitality of Delta farmers, residents, and leaders in addressing challenges to the region's future.

## Legislation and Program

The Delta Conservancy was established as part of SBX7 1, enacted in November 2009, to carry out two mandates beginning in February 2010:<sup>6</sup>

- Act as a primary state agency to implement ecosystem restoration in the Delta (§32320(a)<sup>7</sup>, and
- Support efforts that advance environmental protection and the economic well being of Delta residents. (§32320(b))

For the Delta Conservancy, supporting efforts that advance environmental protection and the economic well being of Delta residents can be thought of as “co-equal” responsibilities.<sup>8</sup>

The Legislature directed that the Conservancy's role of providing support include efforts that:

1. Protect and enhance habitat and habitat restoration
2. Protect and preserve Delta agriculture and working landscapes
3. Provide increased opportunities for tourism and recreation in the Delta
4. Promote Delta legacy communities and economic vitality in the Delta, in coordination with the Delta Protection Commission
5. Increase the resilience of the Delta to the effects of natural disasters such as floods and earthquakes, in coordination with the Delta Protection Commission
6. Protect and improve water quality
7. Assist the Delta regional economy through the operation of the Conservancy's program

## About the Sacramento – San Joaquin Delta and the Conservancy

8. Identify priority projects and initiatives for which funding is needed
9. Protect, conserve and restore the region's physical, agricultural, cultural, historical and living resources
10. Assist local entities in the implementation of their habitat conservation plans (HCPs) and natural community conservation plans (NCCPs)
11. Facilitate take protection and safe harbor agreements under the federal Endangered Species Act of 1973 (16 U.S.C. §1531 et seq.), the California Endangered Species Act (Chapter 1.5, commencing with §2050, of Division 3 of the Fish and Game Code) and the Natural Community Conservation Planning Act (Chapter 10, commencing with §2800, of Division 3 of the Fish and Game Code) for adjacent landowners and local public agencies, and
12. Promote environmental education through grant funding

The Legislature also directed the Conservancy to “undertake efforts to enhance public use and enjoyment of lands owned by the public” when supporting such efforts. (§32322(c))





# About the Sacramento – San Joaquin Delta and the Conservancy

These charges, and the twelve areas of authority identified by the Legislature as deserving support, form the foundation of the Conservancy's program.

The Conservancy has a wide range of tools and authorities available to implement its program, including the ability to:

- Pursue and accept grants and other funding from a variety of sources, including federal, state, and local funds or grants, gifts, donations, bequests, and rents, among others (§32372)
- Award grants and other funding to local government, partner agencies, or nonprofit organizations to further the goals of the Conservancy (§32364.5)
- Engage in partnerships with nonprofit organizations, local public agencies, and landowners (§32362)
- Acquire from willing sellers or transferors interests in real property and improve, lease, or transfer interests in real property (§32366(a))
- Acquire water or water rights (§32380)
- Create and manage endowments (§32372(b))
- Allocate funds to a separate program within the Conservancy for economic sustainability within the Delta (§32360(b)(3))
- Develop projects and programs designed to further the purposes of the Conservancy (§32378(a))
- Provide technical information, expertise, program and project development and other non-financial assistance to public agencies, nonprofit organizations, and tribal organizations to support program and project development (§32378(b))

- Require grantees to specify the manner in which land to be acquired will be managed and analyze a maintaining entity's capacity to support costs of operations, maintenance, and management (§32364.5(b)(3),(4))

The Conservancy also faces certain important limitations and requirements, including legislation directing that it:

- Shall not exercise the power of eminent domain (§32370)
- Shall use conservation easements to accomplish ecosystem restoration wherever feasible (§32366(b))
- Does not have the power to regulate land use or activities on land (§32381)
- Does not have any power over water rights held by others (§32381(c))
- Shall cooperate and consult with the city or county in which a grant is proposed to be expended or an interest in real property is proposed to be acquired, and shall also cooperate and consult as necessary with public water system, levee, flood control or drainage agencies (§32363)



## Mission

The Conservancy's Mission Statement is:

Working collaboratively and in coordination with local communities, the Conservancy will lead efforts to protect, enhance, and restore the Delta's economy, agriculture and working landscapes, and environment, for the benefit of the Delta region, its local communities, and the citizens of California.

## Governance

The Conservancy is governed by a 23-member Board, including eleven voting members, two non-voting members, and ten liaison advisors (§32330 *et seq.*) The Board's chair is selected from among the five Delta county representatives (§32332).

The voting members are:

- Member or designee appointed by the Contra Costa Board of Supervisors
- Member or designee appointed by the Sacramento Board of Supervisors
- Member or designee appointed by the San Joaquin Board of Supervisors
- Member or designee appointed by the Solano Board of Supervisors
- Member or designee appointed by the Yolo Board of Supervisors
- Two public members appointed by the Governor, confirmed by the Senate
- One public member appointed by the Senate Committee on Rules
- One public member appointed by the Speaker of the Assembly

- The Secretary of Resources or a designee
- The Director of Finance or a designee

The non-voting (ex officio) members are:

- A member of the Senate, appointed by the Senate Committee on Rules
- A member of the Assembly, appointed by the Speaker of the Assembly

The liaison advisors are:

- One representative from the U.S. Fish and Wildlife Service
- One representative from the U.S. National Marine Fisheries Service
- One representative of the U.S. Bureau of Reclamation
- One representative of the U.S. Army Corps of Engineers
- A designee of the San Francisco Bay Conservation and Development Commission
- A designee of the State Coastal Conservancy
- A designee of the Suisun Resource Conservation District
- A designee of the Central Valley Flood Protection Board
- A designee of the Delta Protection Commission
- A designee of the Yolo Basin Foundation









## III. Context for the Strategic Plan

The Delta Conservancy is both similar to and different from the nine state conservancies established before it. The enabling legislation of most conservancies, including the Delta Conservancy, grants authority to acquire and preserve land, to enhance public enjoyment of the landscape, and to advance public education about each region. Most enabling statutes also mention habitat restoration or conservation as a major goal; four enabling statutes also focus on preservation of working landscapes. The enhancement of water and air quality, and resilience to natural disasters, are also typical conservancy authorities.

Like other conservancies around the state, the Delta Conservancy has the authority to own or manage land, to distribute grants, and to partner with non-governmental organizations in pursuit of its mission. The Legislature intended that the Delta Conservancy operate in a collaborative and cooperative fashion with significant local input; the Conservancy is not intended to act as a regulator or to acquire land through the exercise of eminent domain.

The Delta Conservancy has a more complex and specific set of authorities than most other conservancies and has some noteworthy differences in its powers and responsibilities. Nearly all conservancies have the powers to acquire, exchange, and improve land from willing sellers, but the Delta Conservancy is uniquely required to “use conservation easements to accomplish ecosystem restoration whenever feasible.” (§32366(b)) The Delta Conservancy is also the only state conservancy explicitly empowered to acquire water rights and “take or fund action” outside of the formal boundaries of its region subject to certain conditions. (§32360.5)

The Delta Conservancy is also unique in that it was not established concurrent with bond funding. Legislation creating the Conservancy also established a Sacramento-San Joaquin Delta Conservancy Fund, which may receive funds from the legislature, future bonds, grants, and a wide variety of other sources, but does not yet possess those funds to any considerable extent. The need to establish a stable funding base for the Conservancy’s activities is a major priority of this Strategic Plan.

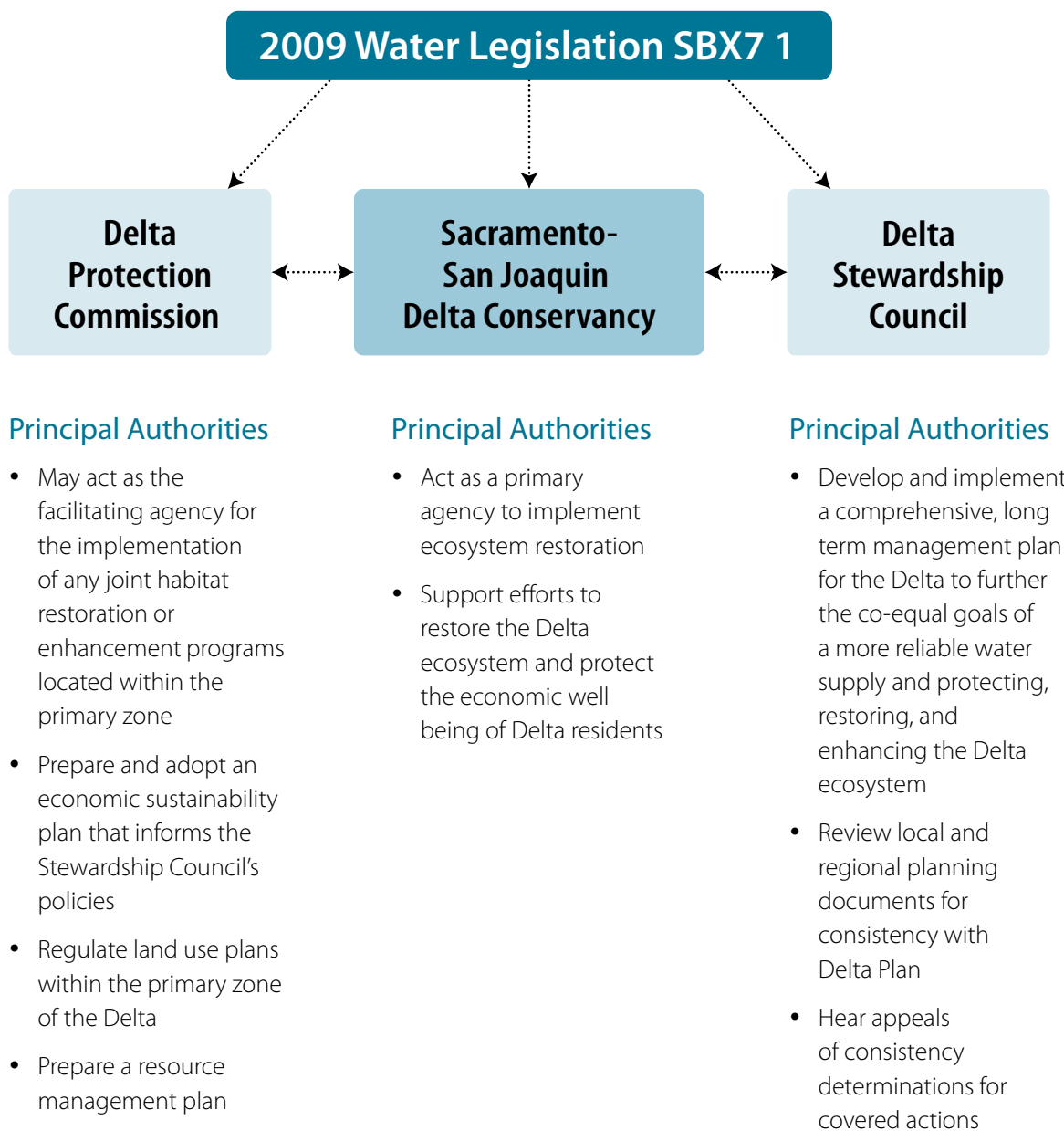
### Regional planning context

The challenges facing the Delta ecosystem and economy are the subject of several other initiatives from state, regional and local government that collectively form the context in which the Delta Conservancy must carry out its mission. The Legislature established the Conservancy and the Delta Stewardship Council and reshaped the Delta Protection Commission through the 2009 water legislation discussed above. The Legislature intended these three agencies to fulfill different yet interrelated and complementary, roles in the protection and

enhancement of the Delta. The Delta Stewardship Council is charged with developing a long-term Delta Plan that will ensure a reliable water supply and a restored Delta

ecosystem. The Delta Protection Commission's goal is to ensure orderly, balanced conservation and development of Delta land resources and improved flood protection.

**Figure 2: Roles and Relationships of Three Delta-focused State Agencies**



The Delta Conservancy Act requires the Conservancy's Strategic Plan to be "consistent" with five other plans and laws. The goals, objectives and strategies contained in this Strategic Plan have been crafted with the intent of ensuring such consistency.<sup>9</sup> The plans and laws are:

- The Delta Stewardship Council's Delta Plan
- The Delta Protection Commission's Land Use and Resource Management Plan for the Primary Zone of the Delta ("RMP")
- The 2012 Central Valley Flood Protection Plan ("CVFPP")
- The 2011 Habitat Management, Preservation and Restoration Plan for the Suisun Marsh ("Suisun Marsh Plan");<sup>10</sup> and
- The Suisun Marsh Preservation Act of 1977<sup>11</sup>

Whether in final or draft form, these plans contain significant provisions intended to shape Delta ecosystem restoration. As an example, the current Delta Plan draft proposes to establish elevation-based habitat restoration zones throughout the legal Delta and require that all habitat restoration actions be "consistent" with those zones.<sup>12</sup>

The Delta Plan may incorporate by reference, and provide for enforcement of, the Bay Delta Conservation Plan (BDCP). The BDCP intends to create an integrated Conservation Strategy for the recovery of Delta species, habitats, and natural communities listed under the federal and state Endangered Species Acts.<sup>13</sup> The BDCP will identify a wide variety of specific Conservation Measures, including several quantified habitat restoration goals, within eleven Conservation Zones and five Restoration Opportunity Areas. The BDCP is intended to result in



long-term permits for the operation of a new conveyance facility and the current water export facilities. The Delta Reform Act provides that the BDCP "shall be considered for inclusion in the Delta Plan" and describes a process for potential incorporation.<sup>14</sup> The Draft Delta Plan describes the process for meeting consistency requirements in the event of BDCP incorporation.<sup>15</sup> These requirements may extend to restoration and other qualifying activities undertaken by the Conservancy.





The Delta Protection Commission's RMP, completed in 2010, defines enforceable land use standards for the Delta's primary zone. These include the principle that agriculture and agriculturally-supported land uses remain the "primary land uses" in the primary zone and that recreation and natural resources uses "be supported in appropriate locations and where conflicts with agricultural land uses or other beneficial uses can be minimized" (Land Use Policy P-2).<sup>16</sup> Habitat and recreational land uses (among others) within the primary zone will have to provide "appropriate buffer areas" to prevent conflict with existing agricultural parcels (Land Use Policy P-3) and potentially "include an adequate financial mechanism in any planned conversion of agricultural lands to wildlife habitat for conservation purposes...[that] specifically offset[s] the loss of local government and special district revenues necessary to support public services and infrastructure" (Natural Resources Policy P-5). The RMP also supports safe harbor agreements (Natural Resources Policy P-6) for agricultural lands and the use of "appropriate incentives such as purchase of conservation easements" to "encourage

farmers...to maximize habitat values for migratory birds and other wildlife" (Natural Resources Policy P-2).

The CVFPP and the Suisun Marsh Plan are also reference points for consistency. The public draft of the CVFPP, released in December 2011 and subject to approval by the Central Valley Flood Protection Board, identifies a series of Flood Management Elements that will update the State Plan of Flood Control facilities throughout the Central Valley and improve overall system performance. In and around the Delta, these elements include expansion and ecosystem enhancement of the Yolo Bypass, fish passage improvements in the Yolo Bypass, evaluation of a new Lower San Joaquin River Bypass along Paradise Cut in the south Delta, and a variety of levee improvement projects in the vicinities of Stockton, Sacramento, and West Sacramento. The CVFPP also contains a preliminary version of a long-term Central Valley Flood System Conservation Framework that includes strategy elements to "preserve important shaded riparian aquatic habitat along riverbanks and help restore the regional continuity/

connectivity of such habitats” and to implement “integrated flood management projects” that improve ecological conditions in addition to flood protection.<sup>17</sup>

The Suisun Marsh Plan of November 2011 (and its associated Environmental Impact Report/Statement) is a comprehensive 30-year management plan. It was developed through a collaborative process with stakeholder participation. The Suisun Marsh Plan addresses conflicts regarding management of existing Marsh resources, the enhancement and long-term management of managed wetlands, and the restoration of tidal wetlands to contribute to the recovery of terrestrial and aquatic listed species. The Plan calls for the tidal restoration of 5,000 – 7,000 acres of historically managed wetlands and the enhancement of 44,000 – 46,000 acres of existing managed wetlands.

The Conservancy’s planning context also includes ongoing city and county planning activities, including general plans, HCPs under the federal Endangered Species Act, and NCCPs under the California Endangered Species Act.<sup>18</sup> These plans have regulatory authority within their jurisdictions, and many of them will identify specific restoration activities in addition to setting the local land use context in which economic enhancement activities will take place. The Legislature did not specify the same “consistency” requirement for the Conservancy regarding this category of plans as for the five plans described above. At a minimum, the Conservancy will benefit from coordination with these locally binding documents. Other state and regional plans potentially influencing the Conservancy’s planning context include the Land Management Plan for the Yolo Bypass Wildlife Area, the Central Valley Joint Venture 2006 Implementation Plan, and the California Coastal Conservancy’s Strategic Plan.

Numerous planning documents provide context for the Delta Conservancy’s economic enhancement responsibilities. The Delta Protection Commission recently completed its “Economic Sustainability Plan for the Sacramento-San Joaquin Delta” (ESP). The ESP identifies a large number of strategies to enhance the Delta regional economy.<sup>19</sup> The strategies with the most direct congruence to the Conservancy’s mission include supporting growth in recreation and tourism, supporting restoration strategies with “little or no conflict with the Delta economy,” supporting “co-development” of restoration and recreation, and an emphasis on conducting restoration on public land or land obtained from willing sellers.<sup>20</sup> Private and non-governmental organizations within the region, such as the Discover the Delta Foundation, also have developed specific proposals to achieve economic enhancement. In addition, local city and county general plans govern land use decisions throughout the Delta region, and many have specific strategies for economic enhancement.







### Funding context

One of the most important characteristics of the Conservancy is its ability to develop and use multiple funding sources. Given large uncertainties in California's economic and state budgetary context, the Conservancy will pursue multiple avenues for funding using strategies identified in this Strategic Plan.

Based on current information, it is unclear when a long-anticipated bond measure to finance water and ecosystem improvements statewide, including significant potential financing for the Delta Conservancy, will be put before voters; a bond measure in 2012 appears unlikely. SBX7 2, passed by the Legislature in 2009, authorized state expenditure of \$11.14 billion in funds should the voters approve such a bond. That total includes authorization of the expenditure of \$1.5 billion “for projects to protect and enhance the sustainability of the Delta ecosystem,” including projects associated with the implementation of the BDCP and “other projects to protect and restore native fish and wildlife dependent on the Delta ecosystem” (§ 79731(b)). The legislation specifically states that these funds “shall be available for appropriation to, among other entities, the Sacramento-San Joaquin Delta Conservancy for implementation consistent with the Delta Plan” (§ 79731(c)).

In addition, the legislation authorizes expenditure of \$750 million for “projects...that provide public benefits and support Delta sustainability options,” including projects that “assist in preserving economically viable and sustainable agriculture and other economic activities in the Delta” (§ 79731(a)(1)). That section of the legislation also authorizes potential expenditures for other capital-intensive Delta sustainability objectives such as levee projects and water quality improvements.

The Draft Delta Plan emphasizes that operational duties imposed by the 2009 legislation “must be addressed and funded,” including duties imposed on the Conservancy.<sup>21</sup> A five-year budget of approximately \$50 million for the Conservancy is part of the Delta Plan's recommended approach.<sup>22</sup> Funding sources that could prove important



to the Conservancy's near-term future include appropriations from the state general fund, carbon offsets that would allow carbon emitters to pay Delta landowners for carbon sequestration activities under AB 32's implementation mechanisms (also recommended by the Delta Plan), dedicated revenue streams from state government such as a license plate fund, foundation

programs, or revenue-generating partnerships with major private or non-profit entities. The near-term potential for the Conservancy to realize benefits from one or more of these sources depends upon a range of national and state factors, including the national economy and the state budget, and in some cases would require additional legislative action.









## IV. Strategic Plan Development

This draft Strategic Plan has been developed through a multi-phase process that reflects the Conservancy's commitment to collaboration, consultation, and transparency.

In Phase I the Strategic Plan team consulted widely with members of the Conservancy Board and the Conservancy's Strategic Plan and Policy Subcommittee; key Delta stakeholder organizations in agriculture and other sectors; and local government officials and staff including county agriculture commissioners (See Appendix D: Stakeholders Consulted in the Development of the Delta Conservancy's Strategic Plan). These activities began in November 2011 and continued into February 2012. The following is a summary of input received from key stakeholders about meeting the Conservancy's co-equal responsibilities.

### Phase I Input from Key Stakeholders

#### *Agriculture and Working Landscapes*

- Preserve agricultural lands and promote their potential habitat value as working landscapes
- Take advantage of farmers' ability to do cost-effective restoration
- Don't re-create the wheel; utilize and collaborate with existing agencies/organizations
- Recognize that there is significant variability across the Delta, including soil types and crops
- Respect the importance of flexibility and predictability for growers

- Support development of a Delta "brand"
- Address the challenges of invasive species
- Support the establishment of a multi-species safe harbor agreement and "good neighbor" policies
- Maintain support for a viable levee system

#### *Tourism and Recreation*

- Define and promote a Delta "brand;" encourage and build off other compatible branding efforts such as Solano Grown and the Delta Loop
- Support a useable boat landing that could be used for tourism
- Consider identifying and promoting tourism and recreation "hubs"
- Link to the agricultural economy through agri-tourism
- Work with agriculture, law enforcement, and local communities to minimize the potential impacts of increased tourism and recreation

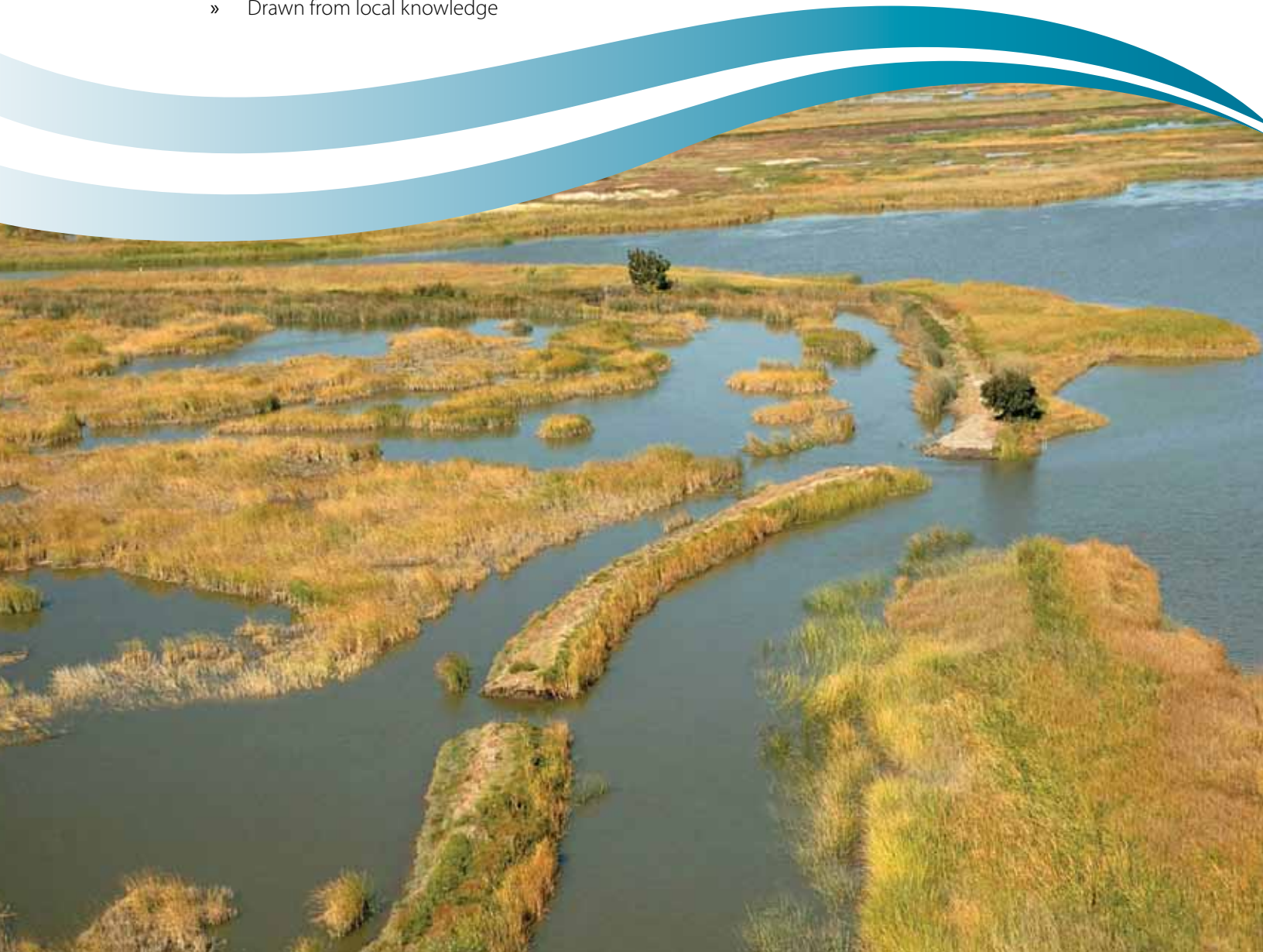
#### *Restoration*

- Support efforts to give "credit" to landowners who use practices that add habitat value (e.g., pesticide management)



## Strategic Plan Development

- Respect each landowner's right to make individual choices related to restoration
- Clearly define the word "restoration" so that people understand how the Conservancy uses that term and can be confident that they are talking about the same thing
- Support "good neighbor" policies to help avoid crop damage and terrestrial species impacts
- Support restoration projects that are:
  - » Based on sound science
  - » Transparent and accessible
  - » Participatory
  - » Drawn from local knowledge
- Focus restoration efforts on lands having lower agricultural "value"
- Pursue restoration on existing public lands, whenever possible, to avoid loss of tax revenue
- Link restoration projects with recreational access and services to create economic value for restored land
- Land ownership should be based on a "willing seller" approach
- Serve as a recognized source of reliable information about Delta restoration projects



## Other Input

- Help increase the resilience of the Delta to the effects of natural disasters through preparedness and response
- Support environmental education
- Preserve cultural and historical resources within the Delta, including Legacy Communities
- Support the overall economy of the Delta
- Participate in development and implementation of relevant habitat conservation plans (HCPs)
- Promote the integration of local knowledge in decision making about the Delta
- Advocate for Delta outcomes that promote the co-equal responsibilities and Conservancy mandates

In Phase II the Strategic Plan team organized and conducted five public input meetings, one in each of the five Delta counties. Each meeting was designed to educate members of the public about the Strategic Plan development process, present preliminary ideas about roles the Conservancy might play in the Delta, and gather input about those and other potential roles for the Conservancy. These public meetings took place during January-February 2012 at the following locations: Rush Ranch (Solano); Peter's Steak House (Isleton); Clarksburg Community Church (Yolo); Antioch Community Center (Contra Costa); and the San Joaquin WorkNet Building (Stockton). The "Phase I Input from Key Stakeholders" described above was presented at all public meetings. These examples and other input offered by a wide range of individuals and organizations interested in the Conservancy and its mission constitute a significant contribution to the goals, objectives, and strategies in this plan.



In Phase III a public draft plan was prepared with input from the Subcommittee and posted on the Conservancy's web page for public comment from March 26 to April 20. The Strategic Plan team conducted three public work sessions for discussion of the public draft plan in Rio Vista (April 10), Clarksburg (April 12), and Oakley (April 14) that were each attended by at least one Conservancy Board member. Conservancy staff also made presentations about the draft public plan at county supervisor meetings in all five Delta counties, and conducted follow up discussions with key Delta stakeholder organizations.

In Phase IV a Draft Strategic Plan was presented to the Board for deliberation at its May 16, 2012 meeting. It reflected the full range of input on the draft public plan, including written comments that can be viewed on the Conservancy's web site. That draft was revised based on comments from the Board and other sources and considered for adoption on June 27, 2012.









## V. Priorities and Criteria

The legislature specified that the Conservancy's Strategic Plan "shall establish priorities and criteria for projects and programs, based upon an assessment of program requirements, institutional capabilities, and funding needs throughout the Delta." Viewed in the broader context of the statute, that direction reflects an expectation that the Conservancy would have funding available to support projects and programs consistent with its authorities.

As noted elsewhere in this plan, the legislation established a Delta Conservancy Fund in the State Treasury and directed that "funds provided for ecosystem restoration and enhancement shall be available for ecosystem restoration projects *consistent with the conservancy's strategic plan* adopted pursuant to Section 32376." [PRC 32360(b)(2)] (emphasis added) The statute provides authority for the Conservancy to "expend funds and award grants and loans to facilitate collaborative planning efforts and to develop *projects and programs* that are designed to further the purposes of this division." [PRC 32378(a)] (emphasis added) In a different section the statute authorizes the Conservancy to "fund or award grants for plans and feasibility studies *consistent with its strategic plan* or the Delta Plan." [PRC 32364(c)] (emphasis added)

This Strategic Plan includes initial priorities and criteria that are responsive to the Legislature's direction, including the Conservancy's ongoing assessment of requirements, capabilities, and funding needs. They reflect the reality of the Conservancy's current scenario (see Section VII), and allow for future refinement in response to changed circumstances.

### Assessment

The Conservancy is in the process of assessing program requirements, the capabilities of existing institutions, its own capabilities, and funding needs throughout the Delta. As noted elsewhere, Conservancy staff met extensively with colleagues in other state, local, and federal agencies, and with other institutions such as land trusts to clarify existing capabilities and needs. The Conservancy also has initiated development of its own Delta Regional Finance Plan to define funding needs (**See** Objective 6.3 below).

### Priorities

The Conservancy's priorities are shaped by the interaction of two factors: funding and plans. These interactions are discussed in detail in Section VII, Implementing the Strategic Plan, in the context of four scenarios that reflect low or high funding for the Conservancy and the uncertain status of relevant planning documents.

In the current situation, where the Conservancy has limited funding and the planning context is uncertain, the Conservancy's priorities are:

- Identifying potential opportunities to advance the Conservancy's mission that do not require additional Conservancy funding and match existing organizational resources. This would include convening a voluntary Restoration Network to coordinate and integrate early restoration in the Delta, and exploring a collaborative Delta Branding effort
- Forging key relationships with other local, state, and federal agencies, non-public organizations, and key stakeholders, and education across the Delta about the Conservancy's roles
- Developing organizational capacity and funding sources

The Conservancy will use information gathered through its ongoing assessment, including its own Finance Plan, to identify future priorities for programs and funding. These will become relevant as the Conservancy transitions into other scenarios described below and in Section VII. In all scenarios, the Conservancy will strive to balance funding of activities with needs identified through internal assessments.

### Criteria

The Conservancy will develop funding criteria to support future grant making in a manner consistent with legal and other requirements. Because of the legal and regulatory aspects of grant making the Strategic Plan is not the appropriate vehicle for such an effort. These criteria, once developed, will ensure that the Conservancy is prepared to fulfill the Legislature's intent once funding becomes available to support its mission.

In the meantime the Conservancy will continue to rely on the mandates and authorities in its legislation as criteria for decision-making about program direction and resource commitments. The five criteria described below reflect those mandates and authorities as well as input gathered through interviews and public meetings as part of the process of preparing this Strategic Plan. They are consistent with the Conservancy's assessment process described above. The Conservancy anticipates that these criteria will be refined, and new criteria developed, in the context of specific future Conservancy projects.

**1. Balance.** The Conservancy will develop and implement its program through a balanced approach to distributing costs and benefits between its co-equal responsibilities consistent with its priorities. The Conservancy will continue to identify efforts and activities with Delta-wide applications and benefits, including information collection and dissemination, and will make every effort over time to allocate resources and activities equitably across the Conservancy's service area. The diversity, complexity, and uniqueness of the Delta may create challenges in achieving this objective, particularly in the Conservancy's early years.

**2. Multiple Benefits.** The Conservancy's co-equal responsibilities are not mutually exclusive. The Conservancy values projects and activities that provide multiple benefits consistent with program goals. The Conservancy will actively look for opportunities to fulfill its mission by identifying and providing multiple benefits and will encourage its partners and collaborators to do the same. The Conservancy will not create barriers between efforts and activities that advance environmental protection on the one hand and those that advance the economic well-being of Delta residents on the other hand. At the same time, the Conservancy understands that multiple benefits will not be available for all projects, or may not necessarily be equal for a



single project or initiative, and will apply a flexible and practical approach. It will lead through collaboration and cooperation with others to identify and integrate the environmental, economic, and social needs linked to sometimes- conflicting goals and desired outcomes of various Delta-focused constituencies.

### **3. Ecosystem Restoration and Economic Development**

**Models.** The Conservancy will encourage the use of multiple models to support decision-making. In its role as a primary state agency to implement ecosystem restoration in the Delta the Conservancy anticipates using models as it makes choices about participating in, supporting, managing, or leading specific restoration activities or programs developed outside the Conservancy. In some cases these may come from the proposed restoration activity or program; in other cases the Conservancy may look to the scientific and technical expertise of the Delta Stewardship Council's Science Program or the Independent Science Board, as well as a Delta Restoration Network (see below). In carrying out its economic development role the Delta the Conservancy anticipates using models as it make choices about participating in, supporting, managing, or leading specific development activities or programs developed outside the Conservancy. The Conservancy will develop its own complementary criteria to use with models, including attention to local, on-the-ground knowledge, and will rely on its Independent Technical Advisory Board ("ITAB") where appropriate.

**4. Mitigation of Impacts.** The Conservancy will be sensitive to impacts, both direct and indirect, of its programs. In general, projects that mitigate impacts are more likely to fit the Conservancy's mission and receive support. Experience has shown that differences in perspective about (1) the nature and extent of impacts, (2) whether they are unavoidable, and (3) appropriate mitigation or compensation, are inevitable. The Conservancy intends to develop its own mitigation policies in consultation with a range of stakeholders, including state and local agencies, other conservancies, not-for-profit organizations, and individual landowners. The process will be open and transparent and will incorporate local perspectives.

**5. Climate Change.** The Conservancy's Board has adopted a Climate Change policy that is included as Appendix C to this plan. The Conservancy's policy will be a consistent criterion for decision-making. The policy will influence evaluation of proposed projects and implementation of those identified for support, and will be part of consultation with the ITAB. The Conservancy anticipates supporting efforts to identify and address information and assistance needs for long-term adaptation of Delta communities to the effects of climate change, including sea level rise. Modeling effects and responses associated with climate change and sea level rise also may present opportunities for collaboration with other state conservancies.







## VI. Goals and Objectives

This Strategic Plan is built primarily around goals, objectives and strategies. There are six goals (see sidebar) that express the range of activities for the Delta Conservancy, both now and in the foreseeable future. The first four goals address substantive program priorities; the latter two goals address organizational and funding priorities. The order of goals is not intended as an indication of priorities.

For each goal the plan identifies multiple objectives: these are focused, actionable and in some cases measurable components of the goals. One or more strategies are associated with each objective. These are potential actions that the Conservancy may undertake to achieve its objectives and goals. The goals, objectives and strategies are intended to cover the range of responsibilities and authorities that the Legislature

articulated for the Conservancy in its enabling legislation. As explained in Section VII, they are presented as a suite of linked choices for the Conservancy that will be shaped primarily by two factors: funding and the status of key plans. The Conservancy will not pursue every goal, objective, or strategy presented in this plan at the same time or with the same level of resources, but will match its choices to circumstances and opportunities.

**Goal:** Establish the Conservancy as a valuable partner with Delta growers, agriculture-related businesses, and residents in protecting and enhancing the Delta's agricultural and working landscapes and sense of place

**Goal:** Lead economic enhancement activities that support the Delta ecosystem and economy

**Goal:** Lead efforts in protecting, enhancing and restoring the Delta ecosystem in coordination with other governmental and non-governmental entities and citizens in the Delta

**Goal:** Establish the Conservancy as a leader in gathering and communicating scientific and practical information about the Delta ecosystem and economy

**Goal:** Create an effective organization based on principles of community service, collaboration, coordination, appropriate transparency, and efficient use of resources to fulfill the Conservancy's mission and deliver its programs

**Goal:** Establish a stable, diversified, and self-sustaining funding base for the Conservancy



# Goal:

**Establish the Conservancy as a valuable partner with Delta growers, agriculture-related businesses, and residents in protecting and enhancing the Delta's agricultural and working landscapes and sense of place**

The Delta's economy and cultural heritage revolve around agriculture. With almost half a million acres of highly productive soils, the Delta is one of California's oldest and most prominent agricultural landscapes. Its rich heritage includes pioneering reclamation efforts, ethnically diverse landholding, and technological inventiveness. Delta farmers continue to innovate today, introducing new crops and dynamic enterprises to the region on a routine basis. The legacy communities along the Sacramento River and elsewhere are a living testament to the Delta's unique history and continuing vitality.

The Conservancy will aid in protecting, enhancing and celebrating Delta agriculture and the special character of its working landscape in new ways that are synergistic

with improving water quality and habitat conservation and with adaptation to climate change, sea level rise, and subsidence of soils. Consistent with the other goals in this Strategic Plan, this means supporting agriculture and economic activity even as the ecosystem is restored. It means identifying ways for landowners to derive economic benefits from other uses of their agricultural lands. It also means developing policies to deal with a changing future, including climate change and sea level rise, and assisting Delta communities in adapting to the effects of those changes. The Conservancy intends to become a bridging agent that embraces ecosystem services across a broad spectrum of types of wetland, agricultural and urban ecosystems.



The Conservancy will also work to communicate the unique value of the Delta to the rest of California and the nation, particularly the large metropolitan regions of Sacramento, Stockton and the Bay Area just on the edges of the Delta, as well as those in Southern California. If California's urban populations understand and value the Delta, resources to protect and celebrate the region's unique character are more likely to be a priority for legislators and other funders.

Water is essential for agriculture and for the Delta ecosystem, and the Conservancy is authorized to support efforts that protect and improve water quality, thereby advancing environmental protection and the economic well being of Delta residents. The Conservancy's roles in relation to the Delta's water resources, and the complex planning and policy processes that affect these resources will evolve over time, consistent with its authorities. The Conservancy will support water quality actions that are consistent with its mission and resources.

## **Objective 1.1: Collaborate with others to develop educational materials, promotional materials and visual representations of the Delta that enhance and communicate a sense of place and promote Delta products**

- **Strategy 1.1.1:** Collaborate with regional educators, non-profits, county agriculture commissioners, local historical societies, artisans, and others to develop educational materials and activities for K-12 students representing significant and distinctive aspects of the Delta
- **Strategy 1.1.2:** Convene a group of Delta interests (e.g., legacy community historians, business leaders, agricultural leaders, educators, residents, landowners, and tenants) to identify common themes that can be used in a unified marketing program to promote in statewide and national media outlets the value of the Delta,

its legacy communities, its agriculture, and its recreation opportunities

- **Strategy 1.1.3:** Provide support for the Delta Protection Commission's effort to explore federal designation of the Delta as a National Heritage Area

## **Objective 1.2: Assist in enhancing Delta agriculture**

- **Strategy 1.2.1:** Collaborate with growers and academic institutions to support ongoing applied research on potential crops and cropping patterns that complement ecosystem restoration efforts in the Delta and reflect understanding of sea level rise and subsidence
- **Strategy 1.2.2:** Work with federal and state officials to assure Delta farmers have access to full information about new crop management programs and grants associated with the U. S. Department of Agriculture and state working lands programs
- **Strategy 1.2.3:** Assist in developing a model agricultural enhancement ordinance that could be used in Delta counties to reduce regulatory barriers to on-farm production of value-added goods and on-farm retail sales
- **Strategy 1.2.4:** Assist in reducing regulatory barriers to siting of agricultural processing facilities or low-impact recreational facilities within Delta floodplains

## **Objective 1.3: Aid in protecting and improving water quality to protect the Delta ecosystem and economy**

- **Strategy 1.3.1:** Adopt policies, including restoration criteria, and support projects that contribute to Delta water quality conditions that support the Conservancy's mission



- **Strategy 1.3.2:** Ensure that Conservancy actions and projects are consistent with water quality criteria in the Delta Plan, official plans and regulations of the State Water Resources Control Board and the San Francisco Bay and Central Valley Regional Water Quality Control Boards, and the constitutional principles of reasonable use and public trust
- **Strategy 1.3.3:** Provide materials and information to educate the general public about Delta water quality issues
- **Strategy 1.3.4:** Coordinate with appropriate State agencies and stakeholders in documenting and disseminating accurate information about Delta water quality, water conservation practices, and Delta flow needs

### **Objective 1.4: Support implementation of plans and programs of federal, state and local agencies to provide flood resilience from subsidence and catastrophic events in coordination with the Delta Protection Commission and the Department of Water Resources**

- **Strategy 1.4.1:** Ensure Conservancy projects maintain or improve levee stability on

Conservancy-owned lands except where levees are to be removed

- **Strategy 1.4.2:** Collaborate on development of eco-friendly levee designs and subsidence reversal for incorporation into Conservancy projects or projects of the Delta Restoration Network (see below)
- **Strategy 1.4.3:** In collaboration with local governments, DWR, the Delta Protection Commission, and the California Emergency Management Agency, assist in identifying and implementing emergency staging areas for flood response
- **Strategy 1.4.4:** Work with Delta growers and landowners and the Independent Technical Advisory Board to identify areas for implementation of subsidence mitigation, potentially including rice and carbon sequestration wetlands, and promote best management practices resulting from current research on subsidence reversal.

### **Object 1.5: Promote integration of Delta agriculture with other elements of the Conservancy's mission**

- **Strategy 1.5.1:** Create an explicit preference for integrative approaches as a criterion for Conservancy support of projects. Such approaches would enhance agricultural potential, restore or conserve habitat, and promote economic well being.
- **Strategy 1.5.2:** Investigate development of a carbon market with the California Air Resources Board and appropriate registries, whereby Delta farmers could receive credit for emissions reductions and carbon sequestration from growing managed wetlands or through rice cultivation.



# Goal:

## Lead economic enhancement activities that support the Delta ecosystem and economy

The Delta economy relies upon the productivity of Delta soils and the people who work them. Since shortly after the Gold Rush enterprising residents have made the Delta into a unique and productive agricultural region. Enhancement of the Delta economy into the future will require development of new economic opportunities for Delta residents while preserving the existing agricultural and recreational activities that form the foundation of the region's economy.

There are ample opportunities for these economic activities to enhance the Delta ecosystem as well. Highly successful models of wildlife-friendly farming and recreation-friendly restoration projects already exist and could be replicated in other locations around the region. The Conservancy will play a key role in advancing those efforts and in innovating new ideas. These may include a "Delta brand" program and regulatory streamlining to directly support Delta agriculture, actions to enhance Delta tourism and recreation, and exploration of opportunities for profit-making carbon storage activities

on Delta lands. In addition, as described in other goals, the Conservancy will pursue opportunities to design restoration projects that promote continued economic use of restored lands. These efforts will include seeking appropriate legal advice to ensure activities do not create extra regulatory burdens for farmers and other landowners.

The Conservancy can serve as a convener for project-focused economic enhancement task forces. In this role the Conservancy will leverage and coordinate the knowledge of a wide range of partners. In the event that existing forums can serve the same purpose the Conservancy will consider partnering to avoid duplication. The Conservancy plans to create an Economic Development Program that will operate in an open and collaborative manner with its task forces, as well as with Delta residents and businesses more broadly. The Delta Protection Commission will be a potentially important collaborator as the Conservancy develops specific economic enhancement projects.



## **Objective 2.1: Develop economic enhancement proposals and projects in collaboration with existing governmental and non-governmental entities, residents and private enterprises**

- **Strategy 2.1.1:** Identify specific elements of the Delta Protection Commission's ESP that are consistent with the Conservancy's mission and incorporate those into the Conservancy's Economic Development Program
- **Strategy 2.1.2:** Create project-focused task forces of local interested parties (e.g., Delta businesses, residents, and government agencies) to develop proposals, funding applications, or business plans for specific economic enhancement projects such as a Delta branding program, Delta agri-tourism, or carbon storage projects. Such projects could include improving visitor accessibility to the Delta by identifying and concentrating investments in visitor-supporting infrastructure, improving facilities and signage in these areas, and exploring public support for Scenic Byway status for Highway 160. This strategy

may also include consideration and support, where appropriate, for implementation of the recommendations contained in California State Parks' "Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh" (2011).

- **Strategy 2.1.3:** Collaborate with the Delta Protection Commission-led effort to establish the Delta Trail and identify specific business opportunities for Delta landowners related to it
- **Strategy 2.1.4:** Conduct a complete recreation survey of the Delta and use the information to support secure funding to inform efforts to enhance recreational opportunities

## **Objective 2.2: Investigate mechanisms for mitigating impacts to agriculture from projects that enhance recreation and tourism or habitat restoration**

- **Strategy 2.2.1:** Complete a feasibility study of farmland mitigation mechanisms to be implemented by lead restoration agencies, including development of a list of current Delta county agricultural land mitigation ordinances and policies
- **Strategy 2.2.2:** Work with local residents and law enforcement to develop mechanisms and methods to reduce impacts from increased usage of the Delta resulting from recreation and tourism or habitat restoration projects





# Goal:

**Lead efforts in protecting, enhancing, and restoring the Delta ecosystem in coordination with other governmental and non-governmental entities and citizens in the Delta**

The Delta ecosystem is highly diverse and complex, with habitats, elevations, and water quality needs varying over wide ranges. It is characterized by land-water interfaces of varying types: tidal marshes, freshwater wetlands, floodplains, and open water habitats. There are large areas of terrestrial habitat of high ecological value: riparian forests, managed farmlands, and dunes and grasslands. Restoration of the Delta ecosystem will require efforts to address all of these varied land and water management challenges and opportunities, and to coordinate and prioritize among them.

The Delta is a very large region, with numerous localized ecosystem contexts. Habitat restoration projects should consider landscape-scale elements in their design, including connectivity between restored areas and the consideration of the full life cycle of species intended to benefit from restoration projects. Restoration of Delta ecosystems should include consideration of ecosystem

threats and stressors to the processes, habitats and species it seeks to restore, as well as consideration of the water flows necessary to make restoration projects successful.

The Legislature directed that the Conservancy act as a primary state agency to implement ecosystem restoration in the Delta.<sup>23</sup> The Conservancy will participate in restoration to the extent that projects are consistent with Conservancy mission, policies, and authorities and funding is available. As noted earlier in this plan, the Conservancy's ecosystem restoration activities must be consistent with the Delta Plan and other specified regional planning documents. In addition, the Conservancy will strive for consistency with the local HCPs and NCCPs currently underway in Delta counties. This will require a high level of coordination among the many governmental and non-governmental entities with important roles in Delta restoration.

### A DELTA RESTORATION NETWORK WILL BE:

- ✓ Entirely voluntary
- ✓ Open to agencies, organizations, and landowners involved in Delta restoration
- ✓ A forum for coordination and information sharing
- ✓ Convened and facilitated by the Conservancy

In this context, a key role for the Conservancy is to convene and lead—through actions consistent with its authorities—a voluntary Delta Restoration Network (“Network”) of implementing agencies, entities and local interests with knowledge about restoration opportunities and concerns. The Network will promote information sharing and its members will jointly develop a voluntary, comprehensive Delta restoration framework in order to encourage coordinated actions among willing governmental and non-governmental entities and private landowners engaged in Delta restoration and habitat management. Individual participation at the local and community level, as well as from state, local, and federal government agencies and non-profits, will be an important objective. Engaging high-level management of network member entities will help ensure success. The Network will bridge the gap between high-level Delta planning efforts and on-the-ground implementation of projects through a landscape-level determination of restoration opportunities. The Conservancy’s role will be consistent with its commitment to collaboration; it will

act as a convener and facilitator of the Network, and as a synthesizer with other Network members to integrate Delta restoration activities into an overarching framework for coordination.

The Conservancy will develop criteria for its own participation in restoration projects, including mitigation projects sponsored or funded by other lead agencies. Effective methods and commitments for long-term monitoring and maintenance of projects, including use of endowments as a funding source, are one possible example. These criteria are not intended to displace criteria developed by other restoration agencies, but rather to reflect the Conservancy’s mission, goals, objectives, and strategies.

The BDCP, Suisun Marsh Plan, and various HCP/NCCPs have restoration targets that must be met to satisfy regulatory requirements. These targets are species- and habitat-specific and include a temporal element. Through the Network, the Conservancy will promote shared understanding of the different targets and joint exploration of opportunities for “credit” towards these targets. It will be important to engage regulatory and resource agencies in this effort, as well as other stakeholders and interested landowners. The relationship of the Conservancy’s restoration policies and criteria to crediting opportunities will also be addressed. One potential outcome will be a description of the relationship of restoration targets and credits in the restoration framework.

Given the Conservancy’s mission, another high priority is to develop models for Conservancy land management that preserve economic uses of the land. There are precedents for this in the Delta, where farming can be undertaken in a manner beneficial to migratory



birds and where restoration projects can incorporate revenue-generating recreational uses like boating and fishing. The Conservancy will develop similar multiple-purpose landscapes and promote recognition of privately managed lands that already provide ecological value as part of a joint restoration framework for the region.

### **Objective 3.1: Identify restoration priorities in collaboration with existing federal, state, regional and local governmental and non-governmental entities engaged in Delta restoration**

- **Strategy 3.1.1:** Convene a voluntary, broad-based “Delta Restoration Network” to share information, jointly develop a restoration framework to coordinate actions among governmental and non-governmental entities engaged in Delta restoration and habitat management, develop landscape-level models, and develop restoration performance measure reporting protocols
- **Strategy 3.1.2:** Identify mechanisms to resolve conflicts and leverage opportunities between Delta Plan restoration policies and local HCPs, and resolve potential duplication between various restoration plans, through the Delta Restoration Network
- **Strategy 3.1.3:** Lead the Delta Restoration Network to develop criteria for prioritization and integration of large-scale ecosystem restoration in the Delta and Suisun Marsh, with local input and use of best available science as foundational principles

- **Strategy 3.1.4:** Consult with the Delta Science Program to incorporate best available science about the historical landscape, landscape ecology principles, landscape-level conceptual models, habitat reference sites relevant to Delta restoration, and adaptive management
- **Strategy 3.1.5:** Participate actively in shaping ecosystem restoration sections of the Delta Plan in future updates, and in feasibility studies related to multiple-use flood bypasses in and around the Delta
- **Strategy 3.1.6:** Through the diverse participants in the Network promote communication and coordination among different restoration agencies and programs about potential land acquisition from willing sellers



**Objective 3.2: Lead Delta ecosystem restoration activities consistent with Conservancy authorities, the Delta Plan and other regional plans and guidance, through a a voluntary Delta Restoration Network, and based on adaptive management**

- **Strategy 3.2.1:** Protect, enhance and restore large areas of interconnected intertidal marsh, floodplain, transitional and upland habitats
- **Strategy 3.2.2:** Establish, enhance and maintain migratory corridors for fish, birds and other animals
- **Strategy 3.2.3:** Protect and enhance wetland and upland habitats on subsided lands, as consistent with agricultural operations
- **Strategy 3.2.4:** Optimize the value of flooded deep islands for aquatic species, as well as for recreation, tourism and water quality
- **Strategy 3.2.5:** Reduce threats and stresses to the processes, habitats, and species that are “targets” of ecosystem restoration goals

- **Strategy 3.2.6:** Ensure appropriate consistency of potential Conservancy-led restoration activities with the Delta Plan, the CVFPP, the Delta Protection Commission’s RMP, the Suisun Marsh Plan, and the Suisun Marsh Preservation Act

**Objective 3.3: Identify appropriate and feasible opportunities for direct Conservancy sponsorship of, or participation in, ecosystem restoration projects**

- **Strategy 3.3.1:** Establish criteria for Conservancy participation in Delta ecosystem restoration projects, including any projects resulting from implementation of the BDCP and any mitigation projects, including criteria for appropriate community outreach and coordination with adjacent landowners
- **Strategy 3.3.2:** In consultation with the voluntary Delta Restoration Network, identify areas of particular restoration interest and assess the potential for conservation easement purchase, mitigation banking, option agreements, or other long-term transfer plans from “willing sellers”
- **Strategy 3.3.3:** Establish methods of prioritizing specific ecosystem restoration opportunities for potential Conservancy sponsorship or participation, including evaluating issues such as technical feasibility, financial feasibility, likelihood of significant ecological benefits, utilizing “marginal” lands such as berms or in-channel islands, impacts on adjacent landowners, and vulnerability of project outcomes to forces beyond the Conservancy’s control
- **Strategy 3.3.4:** Utilize existing planning tools, including Delta GIS Land Suitability Analysis Models and on-the-ground surveys of lands



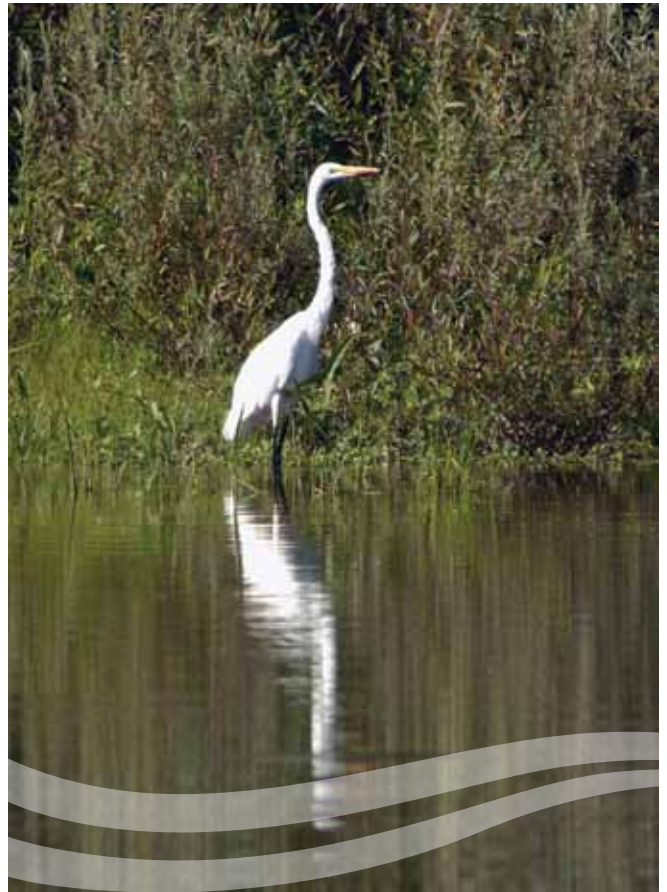


*(owned by willing landowners and with their explicit permission), to identify locations for potential restoration, and establish rigorous due diligence process for any potential acquisition*

- **Strategy 3.3.5:** Develop financial and ecological models for each project prior to acquisition or implementation that incorporate all costs, including future land management and maintenance activities, and only implement those that achieve desired benefits at acceptable long-term cost
- **Strategy 3.3.6:** Utilize expertise of private landowners, consultants, and federal and state agencies in implementation of projects and long-term land management and maintenance
- **Strategy 3.3.7:** Identify best practices in mitigation planning through consultation with other public land management and recreational agencies that have experience, including the East Bay Regional Park District
- **Strategy 3.3.8:** Evaluate options for public/private partnerships to develop restoration projects

## **Objective 3.4: Provide for long-term stewardship of restored landscapes to ensure that the conservation values of each location are preserved and maintained over time**

- **Strategy 3.4.1:** Work with the non-profit land trusts and other Delta interests to identify the most cost-effective and appropriate landholder and land steward for each restoration site
- **Strategy 3.4.2:** Require the development of interim and long-term stewardship plans, including identification of long-term monitoring needs, contingency funding needs,



opportunities for payments in lieu of taxes, and potential for long-term stewardship endowment funding, for each restored landscape prior to initiating restoration. The Conservancy will develop a set of model interim and long-term land ownership plans.

- **Strategy 3.4.3:** Require that lands not held directly by a trustee agency are encumbered either by conservation easements or deed restrictions requiring a long performance term that include stewardship plans, and provide endowment funds to a third party for compliance monitoring



- **Strategy 3.4.4:** Develop agreements with appropriate state agencies and others for third-party easements with an option for the Conservancy to hold easements

### **Objective 3.5: Assess the potential for Conservancy-led habitat restoration and compatible recreational and tourism development of publicly owned lands, and implement feasible projects as funding is available**

- **Strategy 3.5.1:** Collaborate with government agencies and non-governmental organizations to assess the potential of existing publically-owned lands for habitat restoration and compatible recreation and tourism development
- **Strategy 3.5.2:** Establish protocols for Conservancy partnerships to develop habitat restoration and eco-friendly recreation and tourism facilities on publically-owned land

### **Objective 3.6: Provide incentives and acknowledgement to private landowners who maintain and create wildlife habitat on private lands**

- **Strategy 3.6.1:** In consultation with the Delta Restoration Network (*see* Strategy 3.1.1), develop a system of incentives for maintaining and creating habitat on private lands
- **Strategy 3.6.2:** Provide for mitigation for adjacent landowners by working with regulatory agencies to develop agreements or new mechanisms designed to ensure private landowners adjacent to lands that contribute to habitat restoration goals are not adversely affected by incidental occurrences of protected species, such as coordinating with regulatory processes that grant take authority or finding funding to install fish screens
- **Strategy 3.6.3:** Develop pilot projects with willing landowners, California Department of Fish and Game and U.S. Fish and Wildlife Service to test the feasibility of landowner contribution to habitat restoration goals, including federal Safe Harbor Agreements

### **Objective 3.7: Implement restoration projects that provide compatible economic use for landowners or adjacent businesses**

- **Strategy 3.7.1:** Design restoration projects that allow for activities that create revenue, including wildlife-friendly farming practices, boating, and bird-watching, to help pay for long-term maintenance and stewardship of the property
- **Strategy 3.7.2:** Work with regulatory agencies to develop criteria to allow integration of public access into restoration projects where appropriate and compatible with surrounding land uses





# Goal:

## Establish the Conservancy as a leader in gathering and communicating scientific and practical information about the Delta ecosystem and economy

The Conservancy will play an important role as a distributor of information to Delta communities, agencies, non-profits and citizens seeking to contribute to regional ecosystem restoration and economic enhancement. There is a great deal of knowledge within Delta communities, governmental and non-governmental organizations, and educational institutions, but it is often difficult to access. The Conservancy will play a leadership role in efforts to gather and communicate this information and knowledge, as well as to identify knowledge gaps that could be filled through targeted research or information-gathering activities. The Conservancy will also be a leader in identifying and supporting practical, effective approaches to adaptive management, including development of institutional frameworks to support information collection, analysis and use for adaptive management restoration projects in

the Delta. The adaptive management concept can also be extended to other activities of the Conservancy such as economic enhancement activities.

The Conservancy will identify its own information needs, as well as those of the communities it works in, as part of achieving this goal. The Conservancy will base its decisions on best available scientific and technical information as it carries out its mission. The Delta Science Program (DSP) has produced considerable valuable scientific knowledge about the Delta ecosystem. However, there is a need to generate and distribute more knowledge about practical issues in land management, business management, and environmental engineering, which are central to the Conservancy's role in the Delta and have not been a traditional focus of the DSP. The Conservancy will create an Independent Technical



Advisory Board (ITAB) that can provide expertise from applied fields relevant to the Conservancy's mission, along with a Delta landowner perspective. The ITAB will help devise and evaluate criteria for Conservancy participation in restoration or economic enhancement projects and appropriate measures and indicators for project performance. The Conservancy will also promote open communication of information and analysis that is accessible to the full range of Delta communities, citizens, and stakeholders.

The Conservancy will promote shared understanding within the Delta Restoration Network and across the Delta region, including a focus on interests and joint fact finding, as a way of reducing conflicts and collaboratively pursuing the Conservancy's mission.

### **Objective 4.1: Gather and communicate additional technical expertise on matters relevant to the Conservancy's mission**

- **Strategy 4.1.1:** Identify and prioritize scientific and technical issues that are relevant to the Conservancy's mission
- **Strategy 4.1.2:** Create an ITAB whose members are able to provide independent scientific, local agricultural and economic, public health (vector control), business management, land management, flood protection, law enforcement, and engineering advice to the Conservancy
- **Strategy 4.1.3:** Consult with the ITAB in the development of criteria for Conservancy participation in restoration or economic enhancement projects and measures and indicators for project performance
- **Strategy 4.1.4:** Establish and maintain an effective working relationship with the Independent Science Board of the Delta Science Program as an authoritative source for Delta science and encourage their focus on identification of relevant local knowledge and opportunities for its integration into decision making along with more traditional expertise
- **Strategy 4.1.5:** Support education and dialog about effects of subsidence and sea level rise on Delta agriculture, the Delta ecosystem, and the regional economy based on accurate information

## **Objective 4.2: Create an open repository for information and analysis pertinent to the Conservancy's mission**

- **Strategy 4.2.1:** Collaborate with existing state, regional, local, and academic information owners to make relevant information available in a useful format to local communities and citizens
- **Strategy 4.2.2:** Define an appropriate role for the Conservancy in satisfying needs for a "clearinghouse" for GIS and data management systems pertinent to the Conservancy's mission

## **Objective 4.3: Determine long-term information needs of the Conservancy**

- **Strategy 4.3.1:** Prepare a feasibility study report, including identification of relevant costs and funding sources, that evaluates the internal needs for information systems to house Conservancy-specific information such as land ownership, easements, monitoring data, economic data, and recreational use data
- **Strategy 4.3.2:** Identify existing and potential regional and community education, shared learning, research, and demonstration projects that the Conservancy can support and enhance
- **Strategy 4.3.3:** Link information needs to future adaptive management for ecosystem restoration in the Delta including the need for effective institutions and governance structures

## **Objective 4.4: Promote shared understanding of key issues related to agriculture, the Delta economy, and restoration based on accurate information**

- **Strategy 4.4.1:** Apply methods and approaches to discussion and dialog that promote understanding and inquiry in the Delta Restoration Network, the ITAB, economic task forces, and other forums convened or facilitated by the Conservancy
- **Strategy 4.4.2:** Identify and promote the use of appropriate conflict resolution approaches







# Goal:

Create an effective organization based on principles of community service, collaboration, coordination, appropriate transparency, and efficient use of resources to fulfill the Conservancy's mission and deliver its programs

The Conservancy's long-range effectiveness will depend greatly on the level of trust that it develops in the local Delta communities within which it will work. In order to develop this trust, it is critical that the Conservancy's decisions and operations be appropriately open and transparent, so that all interested parties and community members can understand and participate in them.

The Conservancy must implement a balanced program that pursues a fair distribution of costs and benefits associated with ecosystem restoration and protection and promotion of economic well-being. Communities and regions around the Delta should identify value from the Conservancy's efforts over the long term.

The Conservancy's programs and activities must be efficiently and effectively administered so that precious resources are well spent. Coordination and collaboration with other governmental and non-governmental entities is essential. Many such entities are already engaged in restoration and economic enhancement within the Delta; the Conservancy's activities must complement these existing efforts rather than competing with them.

The Conservancy's Interim Strategic Plan identified the creation of an effective organization as a key goal and summarized the activities undertaken during the first year of the Conservancy's existence. The Conservancy hired staff, adopted rules and guidelines for Conservancy

operations, and designed an organizational management structure. Since adoption of the Interim Strategic Plan the Conservancy has hired an Executive Director, continued to build staff, and planned for the development of this Strategic Plan as required by its enabling legislation. The Conservancy has established multiple subcommittees and work groups to assist in development of its Strategic Plan; the Strategic Plan and Policy Subcommittee has been actively and regularly engaged in this effort.

In 2011, the Conservancy co-hosted, along with the Water Education Foundation, a roundtable to look at the complexity of the issues in the Delta entitled “Changing Our Perspective: New Ways of Thinking About the Delta.” The roundtable speakers focused on new perspectives into management options to address these issues. The roundtable was well-received and generated significant follow up discussions.

The Conservancy also convened a meeting—the first in 10 years—of all the state conservancies. This meeting provided the opportunity to discuss better coordination for more efficient use of resources, exchange of information, and development of options to address challenges associated with limited funding.

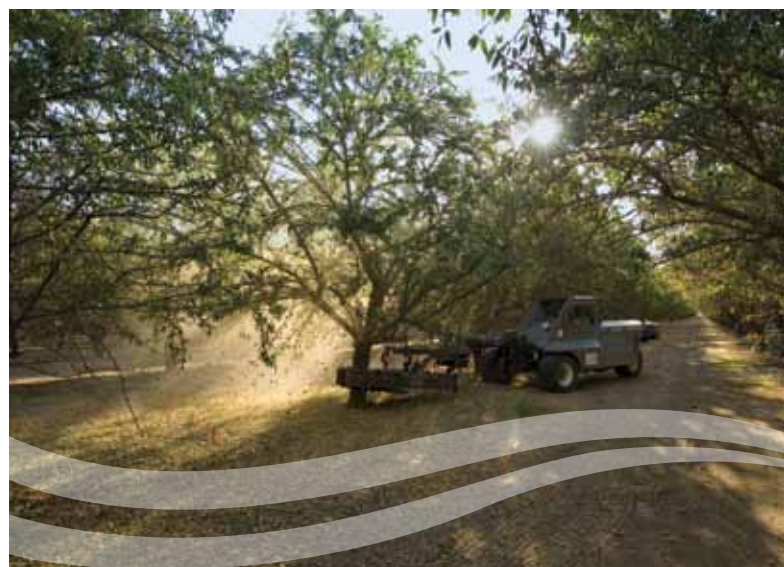
The Conservancy sponsored a grant-writing workshop in the Delta to assist Delta advocates in researching and writing private and publically funded grants. A Delta Grants Coalition is one concrete outcome from the workshop. This group meets bi-monthly to share progress on their efforts to fund projects benefitting the Delta and its residents. In 2012 the Conservancy is planning additional workshops, including one on how to market a business with a limited budget using social media and other low-cost strategies.

Current year efforts for the Conservancy staff include establishing and fostering relationships with individual Delta residents and other groups and organizations

involved in Delta issues. Among these are county Farm Bureau members, hunting and fishing groups, boating groups, historical societies, land trusts and chambers of commerce. The Conservancy staff also are working with state, federal, and local agencies; state and federal legislators and staff; and environmental organizations interested in ecosystem restoration efforts in the Delta.

The Conservancy is coordinating with other state agencies in reviewing and commenting on other Delta planning efforts. These efforts include the Delta Plan, the BDCP, the Delta Protection Commission’s ESP, and the CVFPP. In providing these comments, the Conservancy staff also works closely with its Board, through the Strategic Plan and Policy Subcommittee and the Legislative Committee.

Policies affecting the Conservancy are typically drafted by staff and reviewed and amended in subcommittee meetings before being considered by the full Board. During its March 2012 meeting the Board considered the climate change and sea level rise policy developed through this process. Other policies the Board likely will consider include a “good neighbor” policy and best management practices for land ownership should



the Conservancy own and manage or contract for management of state-owned land in the Delta.

Another focus for the Conservancy will be to develop a full grants program, including policies and criteria. Currently, the Conservancy is able to provide technical support to Delta residents looking for grant assistance, primarily through its Current Funding Opportunities web page ([http://www.deltaconservancy.ca.gov/funding/funding\\_current.html](http://www.deltaconservancy.ca.gov/funding/funding_current.html)) that provides information about available grant opportunities.

The Conservancy partners with non-profit organizations for grants from federal agencies. One such partnership is with the U.S. Bureau of Reclamation and the Water Education Foundation. This grant will bring public outreach funds into the Conservancy for tours, briefings, and workshops focused on key topics in the San Francisco Bay and Sacramento-San Joaquin Delta. Topics include water supply and quality, ecosystem health and restoration, Delta agriculture, climate change impacts specific to the Delta, flood preparedness, and Safe Harbor agreements for local entities.

The Conservancy anticipates being an active participant in the Interagency Implementation Committee described in the DSC's legislation and the Final Draft Delta Plan.

Fully realizing the Conservancy's authorities and meeting its responsibilities will require an effective, lean organization that emphasizes teamwork and flexibility. As funding becomes available the Conservancy should be positioned to make strategic hires to provide the expertise and accountability required for effective program management. Staff and management training needs and staff retention incentives need to be continually assessed and planned into Conservancy budgets. Providing an appropriate working environment will allow staff to fulfill their duties and plan for their own professional development.

### **Objective 5.1: Provide a safe, creative, inspiring, and equitable working environment for staff and management consistent with state standards.**

- **Strategy 5.1.1:** Assign a safety coordinator within the Conservancy who plans and conducts safety drills, reviews office space safety concerns, ensures mandatory safety training is up to date, and communicates safety concerns and issues to management
- **Strategy 5.1.2:** Work with the Department of General Services to ensure workplace security is adequate and assign a workplace ombudsman to listen to staff work place safety issues and bring to management attention as appropriate
- **Strategy 5.1.3:** Ensure all staff and management receive mandatory training in identification and prevention of discrimination and harassment, review with staff annually the "zero tolerance" policy, and take immediate action to investigate any and all claims of discrimination and harassment
- **Strategy 5.1.4:** Establish individual development plans for all staff and review on an annual basis
- **Strategy 5.1.5:** Budget for appropriate staff development training based on individual development plans
- **Strategy 5.1.6:** Plan for staff development through interagency assignments, and create leading and mentoring opportunities

### **Objective 5.2: Develop 5- and 10-year work and staffing plans to fully implement the goals and objectives of this Strategic Plan**

- **Strategy 5.2.1:** Develop work plans to support programs under likely funding scenarios and have these approved by Conservancy Board



- **Strategy 5.2.2:** Develop staffing plans for the work plans to determine expertise required and percentage of a full-time equivalent person required for implementation under likely funding scenarios. Compare expertise requirements to civil service classifications to determine appropriate hiring strategy

### Objective 5.3: Establish through actions a “Delta Conservancy” way of doing business, including the use of performance measures

- **Strategy 5.3.1:** Ensure an open and transparent decision-making process by continuing to adopt understandable rules, guidelines, and procedures for the Conservancy’s business
- **Strategy 5.3.2:** Establish a robust and consistent public outreach and feedback program within the region and in the surrounding metropolitan areas and the state
- **Strategy 5.3.3:** Develop realistic and understandable measures for the Conservancy’s performance and the success of its program, and work with the Conservancy’s Board to incorporate performance measures into decision making
- **Strategy 5.3.4:** Participate in community events consistent with the Conservancy’s mission such as the Yolo Wildlife Area Duck Days
- **Strategy 5.3.5:** Use the Conservancy newsletter as a forum to keep the Delta community informed about progress of the many planning efforts underway in the Delta

### Objective 5.4 Use financial, staff, and Board resources efficiently and effectively

- **Strategy 5.4.1:** Establish an Ecosystem Restoration Program and an Economic Enhancement Program within the Conservancy to organize outreach activities



- **Strategy 5.4.2:** Create a Committee for Economic Development and a Committee for Restoration as standing committees of the full Board using an open process. These committees would have significant Delta representation, including landowners, business owners, and residents. The committees would provide guidance to staff and make recommendations to the Board about activities that could be undertaken to advance the goals of the Conservancy. A visual depiction can be found at Appendix A
- **Strategy 5.4.3:** Maintain an active role in the ongoing development, implementation and updates of the Delta Plan, including the BDCP if it is incorporated into the Delta Plan, to ensure that Conservancy projects and activities are appropriately consistent
- **Strategy 5.4.4:** Participate efficiently in other planning activities that are relevant to the Conservancy’s mission, including state and regional flood management planning efforts, the California Water Plan process, levee maintenance programs and disaster planning activities



# Goal:

## Establish a stable, diversified, and self-sustaining funding base for the Conservancy

The Conservancy was created without a concurrent funding source, but with the clear intention that it would receive funding through a newly created Sacramento – San Joaquin Delta Conservancy Fund. Achieving a stable funding base for operations is therefore a critical goal. The Legislature envisioned the potential for major resources to flow to the Conservancy through passage of a statewide bond measure; the Conservancy must develop a range of reliable funding sources in the event that such a bond measure does not materialize in the next several years. Some of these should be sources that can be sustained in perpetuity, so the Conservancy can embark on long-range restoration activities with confidence.

State conservancies have the flexibility to combine funding from a wide variety of sources, including state and federal government programs and agency

partnerships, bond funds, fees, revenue-generating partnerships with private enterprises or non-profits, and grants from private foundations. The Conservancy will pursue all of these avenues, based in part on the Conservancy's own Finance Plan now under development.

### Objective 6.1: Establish funding from multiple, diverse state and federal government sources

- **Strategy 6.1.1:** Develop proposal for license plate fund item devoted to Delta Conservancy programs and projects
- **Strategy 6.1.2:** Develop proposal for adequate permanent funding commensurate with the Conservancy's legislative mandates and authorities in state general fund or other appropriate fund

- **Strategy 6.1.3:** Evaluate development of a separate fund for agriculture and working landscapes within the overall Delta Conservancy Fund established by the Legislature, and assess the long-term viability of available funding sources to ensure continued solvency for the special fund
- **Strategy 6.1.4:** Work with Department of Finance and the Administration to identify funding sources
- **Strategy 6.1.5:** Educate local communities on potential benefits of Conservancy-related portions of any future bond measures
- **Strategy 6.1.6:** Match Conservancy projects and activities with funding availability from federal and State funding sources available through open solicitations
- **Strategy 6.1.7:** Develop and maintain strategic relationships with other key state and federal agencies in the Delta to identify areas of potential collaboration and joint funding
- **Strategy 6.1.8:** Develop mechanisms that allow beneficiaries of the Delta Plan to contribute financing to the Conservancy's projects and long-term operations and maintenance
- **Strategy 6.1.9:** Develop grant writing expertise in collaboration with potential grant partners
- **Strategy 6.1.10:** Develop endowment fund to enable acceptance of funding from State, local and private sources for long-term monitoring and maintenance of restoration sites, including payments in lieu of taxes

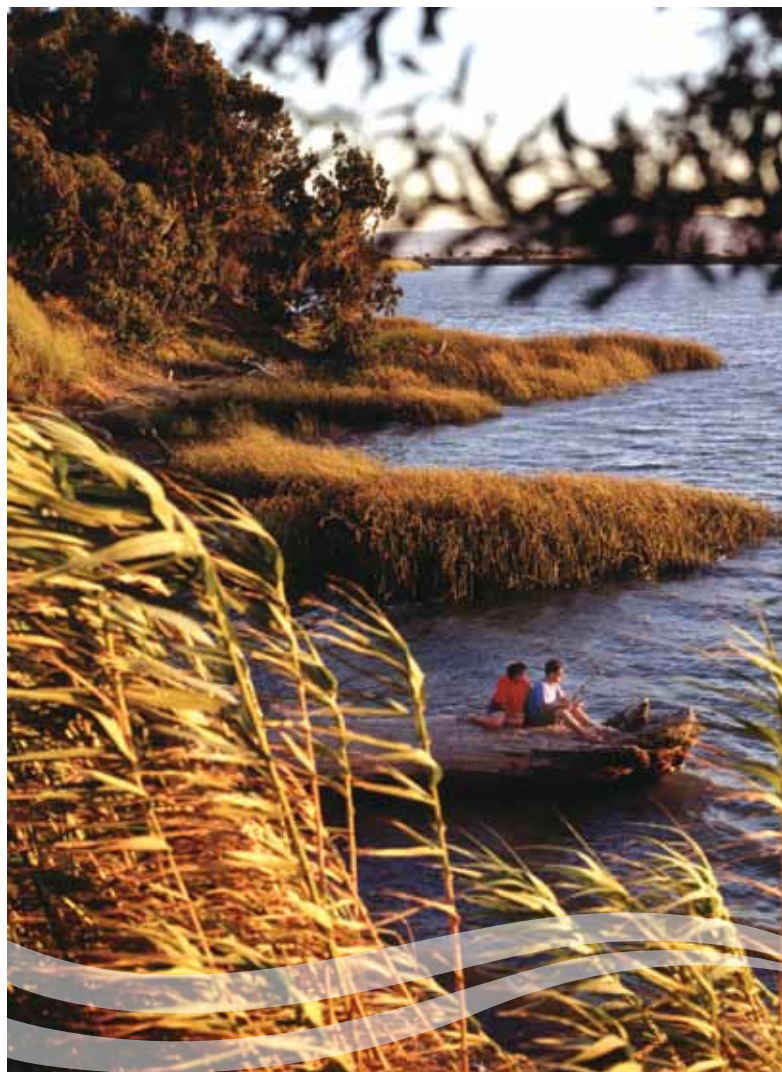
### Objective 6.2: Develop private revenue sources

- **Strategy 6.2.1:** Generate proposals for revenue-generating partnerships with private entities

- **Strategy 6.2.2:** Seek targeted private foundation funding to support self-sustaining revenue sources in collaboration with others

### Objective 6.3: Complete the Conservancy's own near-term Delta Regional Finance Plan to guide development of a funding base

- **Strategy 6.3.1:** Create a process for the Conservancy Board to guide the direction of the Conservancy's Delta Regional Finance Plan
- **Strategy 6.3.2:** Communicate the findings and priorities of the Conservancy's Delta Regional Finance Plan to the public, partners and decision makers at all levels









## VII. Implementing the Strategic Plan

This Strategic Plan is intended to support decision-making in an uncertain future. The near-term context for the Conservancy—the next two to three years—will be shaped both by funding opportunities and by the evolution of the regional planning context described in Section III. The Conservancy’s role in Delta ecosystem restoration activities potentially will be influenced by multiple plans now in various stages of development or implementation.

These plans and their potential significance have been discussed in earlier sections of this document. Regardless of their content, however, these plans are unlikely to fully account for all potentially useful restoration actions that the Conservancy may wish to undertake. Moreover, actions proposed within one or more of these plans may not meet the criteria for participation that the Conservancy will establish as it implements this Strategic Plan. Some of these criteria, such as balance, multiple benefits, and mitigation of impacts, are discussed in Section V above. With this important caveat, the presence or absence of specific restoration frameworks and targets, and associated funding and agency motivation for Delta restoration actions, will likely be significant factors that affect the Conservancy’s implementation of this Strategic Plan.

Given this uncertain and dynamic context it is useful to think of implementation in stages. The Delta Conservancy lacks sufficient funding to realize all of the goals and objectives identified in this Strategic Plan and will commit existing resources based on priorities discussed above. That said, many of the strategies described herein are intended to be useful even with current funding levels.

This low-funding status is Stage 1 of the Conservancy’s evolution. At some point in the future the Conservancy will secure stable and sufficient funding sources to meet all of its goals and objectives; this will be Stage 2. Achievement of the funding objectives identified above is essential to moving the Conservancy from Stage 1 to Stage 2.

There are two possible scenarios in Stages 1 and 2: a “without plans” scenario (called Scenario A) that assumes the BDCP, in particular, is not completed and incorporated into the Delta Plan, and a “with plans” scenario (called Scenario B) that assumes the Delta Plan, BDCP and other important regional plans are completed, adopted, and become enforceable. These different combinations point to four general roles for the Conservancy over the next two to five years:

- Stage 1 (low funding), Scenario A (no plans):  
“Conservancy as entrepreneur”—*current status*
- Stage 1 (low funding), Scenario B (with plans):  
“Conservancy as broker”

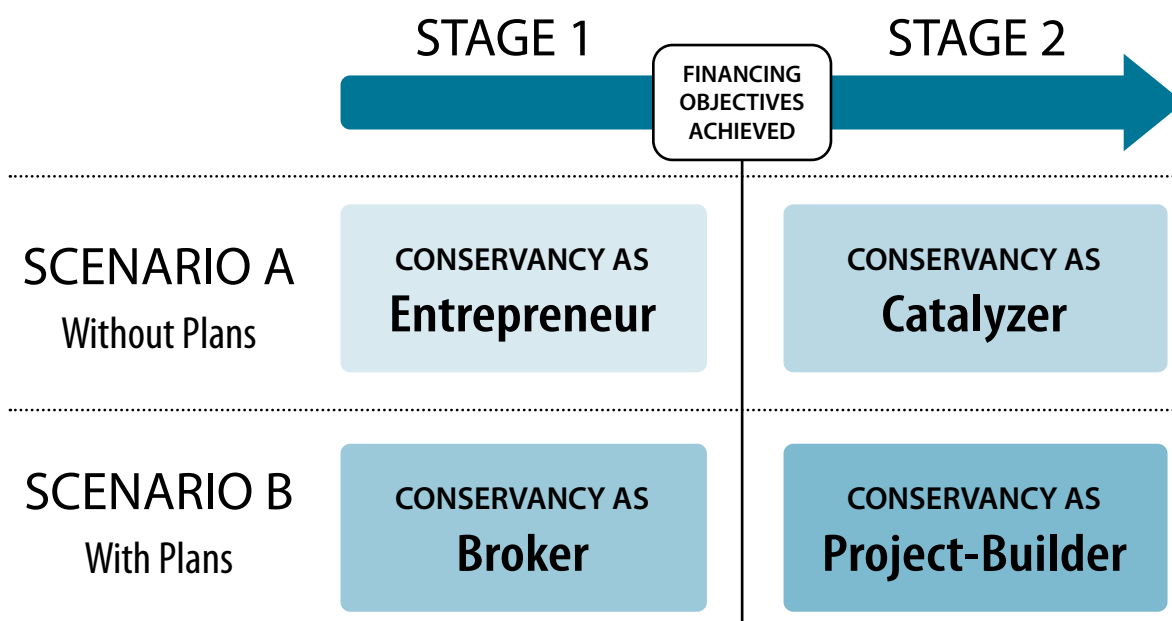


## Implementing the Strategic Plan

- Stage 2 (high funding), Scenario A: “Conservancy as catalyzer”
- Stage 2 (high funding), Scenario B: “Conservancy as project-builder”

These scenarios are described in greater detail below. The specific strategies mentioned within these descriptions are for illustrative purposes only, and their inclusion is not meant to imply the exclusion or diminishment of other potential strategies described in this Strategic Plan. An illustration of the relationship of these scenarios is included as Figure 3.

**Figure 3: Four Potential Roles of the Delta Conservancy**





### *Stage 1 (low funding), Scenario A (no plans): “Conservancy as entrepreneur”*

This is the Conservancy's current status. Under these conditions, the Conservancy will focus on achieving its financing objectives as well as initiating several key strategies to inaugurate program-related activities and collaborations with existing staff and funding resources. These should include high-leverage convening functions, such as the creation of the Delta Restoration Network (Strategy 3.1.1) to develop a voluntary framework for coordination of restoration activities in the Delta, and the creation of one or more economic enhancement task forces (Strategy 2.1.2) to identify specific and viable economic development projects for implementation, all with participation of local landowners and agricultural interests.

In the absence of both stable funding and the planning impetus for agency- and stakeholder-sponsored restoration activities, the Conservancy will take a leadership role in both defining what needs to be done and how to do it. This may involve working with Delta Restoration Network participants to develop criteria for prioritization and integration of large-scale ecosystem restoration in the Delta (Strategy 3.1.3), and identifying specific elements of the Delta Protection Commission's ESP to incorporate into the Conservancy's Economic Development Program (Strategy 2.1.1).

In this context implementation (and organizational development) will need to proceed on a project-by-project basis. Defining specific activities that deliver tangible results individually and build on one another over time will be important. The Conservancy will retain wide latitude to strategize and implement





economic enhancement activities provided these can be financed. The Conservancy will place more emphasis on developing additional sources of funding for such activities, potentially including partnerships with private entities or other innovative mechanisms.

### *Stage 1 (low funding), Scenario B (with plans): “Conservancy as broker”*

In this scenario the Delta Plan and BDCP would be in effect and would create a situation in which, over time, large amounts of restoration occur in the Delta under the financial sponsorship of other entities. While the Conservancy would still pursue its objective of defining its own restoration criteria while respecting those established by other restoration agencies and programs, the relative emphasis on strategies in this plan might change. For example, identifying mechanisms to resolve conflicts between Delta Plan restoration policies and local HCPs (Strategy 3.1.2) and establishing written criteria for

Conservancy participation in Delta ecosystem restoration projects (Strategy 3.3.1) would be relatively more important in this scenario. Restoration activities resulting from project mitigation (Strategy 3.3.2), as opposed to sponsorship by bond funds or other direct funding sources, would become a relatively more important part of the Conservancy’s portfolio.

As in the previous scenario, the Conservancy would retain wide latitude to strategize and implement economic enhancement activities, provided that they can be financed.

### *Stage 2 (high funding), Scenario A (no plans): “Conservancy as catalyzer”*

If the Conservancy proceeds to a well-funded Stage 2 without the regional plans coming into effect, it will have both the opportunity and the responsibility to implement restoration without a binding restoration plan from the BDCP. At the same time, the absence of a BDCP and/or Delta Plan would limit the regulatory impetus for other agencies and stakeholders to sponsor restoration projects in the Delta. The Conservancy would take on a relatively larger leadership role in defining restoration objectives for the Delta, providing or locating the funding resources, and crafting the appropriate institutional relationships to achieve those objectives.

In this scenario the Conservancy would support and facilitate the Delta Restoration Network in the creation of a Delta restoration framework and a voluntary agreement on the role of various agency and non-profit partners in the implementation of that framework (Strategy 3.1.1). The Conservancy would also place a relatively higher emphasis on activities such as the development of land suitability criteria for restoration (Strategy 3.3.3).

### *Stage 2 (high funding), Scenario B (with plans): “Conservancy as project-builder”*

In a resource-rich Stage 2 where the principal regional plans take effect, the Conservancy would undertake a wide variety of actions throughout the Delta in pursuit of its mission consistent with planning rules formulated by other agencies.

Restoration activities would be given a strong impetus by an enforceable Delta Plan and BDCP, potentially creating a central role for the Conservancy in implementation. These regional planning drivers would create a scenario in which certain actions that the Conservancy might take in the Delta landscape potentially would be subject to a consistency determination by the Delta Stewardship Council, review and comment by the Delta Protection Commission, or both. This scenario applies both to ecosystem restoration and economic enhancement.

In this scenario, the Conservancy would devote relatively more energy to designing the institutional, contracting, and project management mechanisms necessary to meet any relevant planning requirements, and to ensuring the long-term success of restoration actions. Strategies such as developing financial and ecological models for projects (Strategy 3.3.5), improving visitor accessibility to the Delta (Strategy 2.1.2), development of Safe Harbor agreements (Strategy 3.6.3) and completion of a feasibility study of farmland mitigation mechanisms to be undertaken by lead restoration agencies (Strategy 2.2.1), would take on added importance in this scenario.

In both Stage 2 scenarios all strategies in this Strategic Plan would potentially be pursued. This plan anticipates and expects that the Conservancy, through successful execution of its objectives and strategies on financing, would reach Stage 2 and possess the funding resources necessary to achieve its strategic goals and make its vision a reality.









## VIII. Next Steps

Adoption of this Strategic Plan by the Board satisfies the Legislature's direction and marks another milestone for the Conservancy since it was formally established in February 2010. The Plan establishes a useful framework for future decisions and activities intended to maintain and increase progress in achieving the Conservancy's mission. The Conservancy will continue working collaboratively and in coordination with the many citizens, landowners, and government agencies engaged in protecting the Delta's ecosystem and enhancing its economy.

This Strategic Plan is intended to serve as a flexible working document for the Board and Conservancy staff. The Board expects to review and update this plan no more than five years after it is adopted; the timing of that

review will depend on the factors described above. The Board's review process will be open and, as with this first Strategic Plan, will include a significant opportunity for input from a wide range of stakeholders.

# Glossary

**Adaptive management:** a framework and flexible decision-making process of ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvement in management planning and project implementation to achieve specified objectives.

**Balanced program:** a fair distribution of costs and benefits across the Conservancy's co-equal responsibilities and the geographic distribution of its projects.

**Conservancy:** 1) a body concerned with the preservation of nature, specific species, or natural resources including agriculture, e.g., the Sacramento-San Joaquin Delta Conservancy; 2) the conservation of something, especially wildlife and the environment, in particular: preservation, protection, or restoration of the natural environment, natural ecosystems, vegetation, and wildlife; preservation, repair, and prevention of deterioration of archaeological, historical, and cultural sites and artifacts; and prevention of excessive or wasteful use of a resource.

**Delta:** The Sacramento-San Joaquin Delta, as defined in Water Code Section 12220, the Suisun Marsh, and the Yolo Bypass.

**Delta Legacy Community:** A handful of selected Delta towns that have high cultural, historic, or ambiance value that give the Delta a distinctive sense of place. Examples are Clarksburg, Courtland, Isleton, Locke, Ryde, and Walnut Grove.<sup>24</sup>

**Delta Restoration Network:** A voluntary, collaborative forum of Delta restoration agencies, other stakeholders, and Delta landowners and citizens that will be convened, facilitated, and supported by the Delta Conservancy. Network participants will share information and jointly develop a comprehensive restoration framework to promote coordination of restoration activities, among other activities.

**Delta Science Program:** The Delta Science Program was established as part of the Delta Stewardship Council to develop scientific information and synthesis for the state of scientific knowledge on issues critical for managing the Bay-Delta system. That body of knowledge must be unbiased, relevant, authoritative, integrated across state and federal agencies, and communicated to Bay-Delta decision-makers, agency managers, stakeholders, the scientific community, and the public. The Lead Scientist is responsible for leading, overseeing, and guiding the Science Program.

**Flood Protection:** Structural and nonstructural methods of mitigating, avoiding, or reducing flooding hazards or risks.

**Good Neighbor Policies:** Policies to avoid negative impacts on agricultural land as a result of habitat enhancements. The goals of these policies are to assist in avoiding negative impacts, addressing and resolving unavoidable impacts, and fostering good communication and relationships among neighbors and communities. These policies may also include establishing Safe Harbor agreements that, among other things, limit liability for incidental take associated with agricultural and recreational activities adjacent to wildlife lands.



**Habitat Conservation Plans (HCPs):** Planning documents required by the U.S. Fish and Wildlife Service for an incidental take permit under the federal Endangered Species Act. Incidental take permits are required if a proposed activity would result in the “incidental take” of a listed wildlife species. HCPs describe the anticipated effects of the proposed taking, how those impacts will be minimized or mitigated, and how the HCP is to be funded.

**Independent Science Board (ISB):** The Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act) establishes the Delta ISB, whose members are to be appointed by the Delta Stewardship Council, which was also created by the Delta Reform Act as an independent agency of the State of California. The current Delta ISB members were appointed by the Council on May 27, 2010 for five-year terms. The Council developed and approved a Charge to the Delta ISB on August 26, 2010. The Delta ISB replaces the previous CALFED Independent Science Board.

**Independent Technical Advisory Board (ITAB):** The ITAB is intended support the Conservancy’s mission by ensuring that local technical knowledge is part of decision making about programs, policies, and projects. The ITAB will be a complement to scientific and technical forums such as the Independent Science Board and the Delta Stewardship Council’s Science Program.

**Natural Community Conservation Plans (NCCPs):** NCCPs identify and provide for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. The primary objective of the NCCP is to conserve natural communities at the ecosystem level while accommodating compatible land use.

**Pacific Flyway:** A major north-south route of travel for migratory birds in the Americas, extending from Alaska to Patagonia. Every year, migratory birds travel some or all of this distance both in spring and in fall, following food sources, heading to breeding grounds, or travelling to overwintering sites. The Delta, Suisun Marsh, and Yolo Bypass are part of the Pacific Flyway.

**Suisun Marsh:** The largest brackish marsh on the west coast of the United States. The marsh is immediately west of the Sacramento-San Joaquin Delta and is also a part of the San Francisco Bay estuary. It includes 116,000 acres of bays, sloughs, tidal marsh, diked-managed wetlands, seasonal marshes, lowland grasslands, upland grasslands, and cultivated lands.

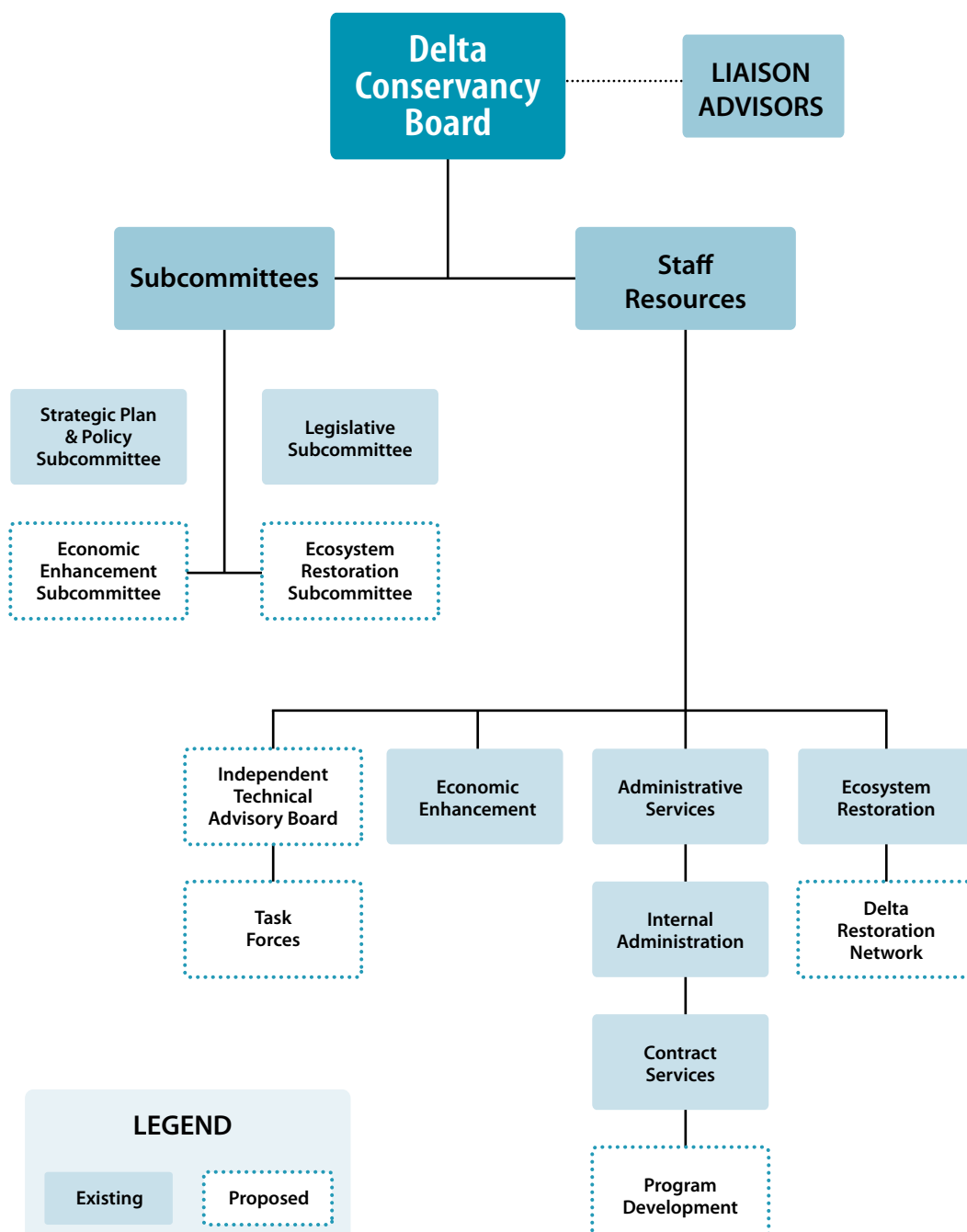
**Sustainability:** the capacity to endure; in this document, sustainable/sustainability refers to plans or actions that help to meet the needs of the present without compromising the ability of future generations to meet their own needs.

**Sustainable agriculture:** A sustainable agriculture is one that, over the long term, enhances environmental quality and the resource base on which agriculture depends; provides for basic human food and fiber needs; is economically viable, and enhances the quality of life for farmers and society as a whole.

**Working Landscapes:** The working landscape is defined as an economically and ecologically vital and sustainable landscape where agricultural and other natural resource-based producers generate multiple public benefits while providing for their own, and their communities’, economic and social well-being.

# Appendix A:

## Sacramento-San Joaquin Delta Conservancy Organizational Chart



# Appendix B:

## Sacramento-San Joaquin Delta Conservancy Act

### Chapter 1. General Provisions

Public Resources Code, Section 32300. This division shall be known, and may be cited, as the Sacramento-San Joaquin Delta Conservancy Act.

32301. The Legislature finds and declares all of the following:

- (a) The Sacramento-San Joaquin Delta is a unique natural resource of local, state, and national significance.
- (b) At 1,300 square miles, the Delta is the largest estuary on the west coast of North and South America.
- (c) Its rivers and labyrinths of sloughs and channels are home to 750 species of plants and wildlife as well as 55 species of fish, provide habitat for 700 native plant and animal species, and are part of the Pacific Flyway.
- (d) The Delta contains more than 500,000 acres of agricultural land, with unique soils, and farmers who are creative and utilize innovative agriculture, such as carbon sequestration crops, subsidence reversal crops, wildlife-friendly crops, and crops direct for marketing to the large urban populations nearby.
- (e) The Delta and Suisun Marsh provide numerous opportunities for recreation, such as boating, kayaking, fishing, hiking, birding, and hunting. Navigable waterways in the Delta are available for public access and currently make up the majority of recreational opportunities. There is a need for land-based recreational access points including parks, picnic areas, and campgrounds.
- (f) The Delta's history is rich with a distinct natural, agricultural, and cultural heritage. It is home to the community of Locke, the only town in the United States built primarily by early Chinese immigrants. Other legacy communities include Bethel Island, Clarksburg, Courtland, Freeport, Hood, Isleton, Knightsen, Rio Vista, Ryde, and Walnut Grove.
- (g) The Delta is home to more than 500,000 people and 200,000 jobs, and contributes over thirty-five billion dollars (\$35,000,000,000) to the state's economy.
- (h) In addition, the Delta provides water to more than 25 million Californians and three million acres of agricultural land. It supports a four hundred billion dollar (\$400,000,000,000) economy and is traversed by energy, communications, and transportation facilities vital to the economic health of California.
- (i) A Sacramento-San Joaquin Delta Conservancy can support efforts that advance both environmental protection and the economic well-being of Delta residents in a complementary manner, including all of the following:
  - (1) Protect and enhance habitat and habitat restoration.
  - (2) Protect and preserve Delta agriculture and working landscapes.
  - (3) Provide increased opportunities for tourism and recreation.
  - (4) Promote Delta legacy communities and economic vitality in the Delta in coordination with the Delta Protection Commission.
  - (5) Increase the resilience of the Delta to the effects of natural disasters such as floods and earthquakes, in coordination with the Delta Protection Commission.
  - (6) Protect and improve water quality.
  - (7) Assist the Delta regional economy through the operation of the conservancy's program.
  - (8) Identify priority projects and initiatives for which funding is needed.



- (9) Protect, conserve, and restore the region's physical, agricultural, cultural, historical, and living resources.
- (10) Assist local entities in the implementation of their habitat conservation plans (HCPs) and natural community conservation plans (NCCPs).
- (11) Facilitate take protection and safe harbor agreements under the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.) and the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code) for adjacent landowners and local public agencies.
- (12) Promote environmental education.

### Chapter 2. Definitions

32310. For the purposes of this division, the following terms have the following meanings:

- (a) "Board" means the governing board of the Sacramento-San Joaquin Delta Conservancy.
- (b) "Conservancy" means the Sacramento-San Joaquin Delta Conservancy.
- (c) "Delta" means the Sacramento-San Joaquin Delta as defined in Section 12220 of the Water Code.
- (d) "Fund" means the Sacramento-San Joaquin Delta Conservancy Fund created pursuant to Section 32360.
- (e) "Local public agency" means a city, county, special district, or joint powers authority.
- (f) "Nonprofit organization" means a private, nonprofit organization that qualifies for exempt status under Section 501(c)(3) of Title 26 of the United States Code and that has among its principal charitable purposes preservation of land for scientific, recreational, scenic, or open-space opportunities, protection of the natural environment, preservation or enhancement of wildlife, preservation of cultural and historical resources, or efforts to provide for the enjoyment of public lands.
- (g) "Suisun Marsh" means the area defined in Section 29101 and protected by Division 19 (commencing with Section 29000).

### Chapter 3. Sacramento-San Joaquin Delta Conservancy

32320. There is in the Natural Resources Agency the Sacramento-San Joaquin Delta Conservancy, which is created as a state agency to work in collaboration and cooperation with local governments and interested parties.

32322. (a) The conservancy shall act as a primary state agency to implement ecosystem restoration in the Delta.

- (b) The conservancy shall support efforts that advance environmental protection and the economic well-being of Delta residents, including all of the following:
  - (1) Protect and enhance habitat and habitat restoration.
  - (2) Protect and preserve Delta agriculture and working landscapes.
  - (3) Provide increased opportunities for tourism and recreation in the Delta.
  - (4) Promote Delta legacy communities and economic vitality in the Delta, in coordination with the Delta Protection Commission.
  - (5) Increase the resilience of the Delta to the effects of natural disasters such as floods and earthquakes, in coordination with the Delta Protection Commission.
  - (6) Protect and improve water quality.
  - (7) Assist the Delta regional economy through the operation of the conservancy's program.
  - (8) Identify priority projects and initiatives for which funding is needed.
  - (9) Protect, conserve, and restore the region's physical, agricultural, cultural, historical, and living resources.
  - (10) Assist local entities in the implementation of their habitat conservation plans (HCPs) and natural community conservation plans (NCCPs).
  - (11) Facilitate take protection and safe harbor agreements under the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.), the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code), and the Natural

Community Conservation Planning Act (Chapter 10 (commencing with Section 2800) of Division 3 of the Fish and Game Code) for adjacent landowners and local public agencies.

- (12) Promote environmental education through grant funding. (c) When implementing subdivision (b), the conservancy shall under-take efforts to enhance public use and enjoyment of lands owned by the public.

#### Chapter 4. Governing Board

32330. The board shall consist of 11 voting members and two nonvoting members, appointed or designated as follows:

The 11 voting members of the board shall consist of all of the following:

- (1) The Secretary of the Natural Resources Agency, or his or her designee.
- (2) The Director of Finance, or his or her designee.
- (3) One member of the board or a designee who is appointed by the Contra Costa County Board of Supervisors, who is a resident of that county.
- (4) One member of the board or a designee who is appointed by the Sacramento County Board of Supervisors, who is a resident of that county.
- (5) One member of the board or a designee who is appointed by the San Joaquin County Board of Supervisors, who is a resident of that county.
- (6) One member of the board or a designee who is appointed by the Solano County Board of Supervisors, who is a resident of that county.
- (7) One member of the board or a designee who is appointed by the Yolo County Board of Supervisors, who is a resident of that county.
- (8) Two public members appointed by the Governor, subject to confirmation by the Senate.
- (9) One public member appointed by the Senate Committee on Rules.
- (10) One public member appointed by the Speaker of the Assembly.
- (b) The two nonvoting members shall consist of a Member of the Senate, appointed by the Senate Committee on Rules, and a Member of the Assembly, appointed by the Speaker of the Assembly. The members appointed under this subdivision shall meet with the conservancy and participate in its activities to the extent that this participation is not incompatible with their positions as Members of the Legislature. The appointed members shall represent a district that encompasses a portion of the Delta.
- (c) Ten liaison advisers who shall serve in an advisory, nonvoting capacity shall consist of all of the following:
  - (1) One representative of the United States Fish and Wildlife Service, designated by the United States Secretary of the Interior.
  - (2) One representative of the United States National Marine Fisheries Service, designated by the United States Secretary of the Interior.
  - (3) One representative of the United States Bureau of Reclamation, designated by the United States Secretary of the Interior.
  - (4) One representative of the United States Army Corps of Engineers, designated by the Commanding Officer, United States Army Corps of Engineers, South Pacific Division.
  - (5) A designee of the San Francisco Bay Conservation and Development Commission for coordination purposes.
  - (6) A designee of the State Coastal Conservancy for coordination purposes.
  - (7) A designee of the Suisun Resource Conservation District for coordination purposes.
  - (8) A designee of the Central Valley Flood Protection Board.
  - (9) A designee of the Yolo Basin Foundation.
  - (10) A designee of the Delta Protection Commission.

- (d) The public members appointed by the Governor shall serve for a term of four years, with a two-term limit.
- (e) The locally appointed members and alternates shall serve at the pleasure of the appointing board of supervisors.
- (f) The public members appointed by the Senate Committee on Rules or the Speaker of the Assembly shall serve for a term of four years, with a two-term limit.
- (g) The Members of the Senate and Assembly shall serve at the pleasure of the appointing body.
- (h) Alternates may be appointed by the county boards of supervisors.

32332. Annually, the voting members of the board shall elect from among the voting members a chairperson and vice chairperson, and other officers as necessary. If the office of the chairperson or vice chairperson becomes vacant, a new chairperson or vice chairperson shall be elected by the voting members of the board to serve for the remainder of the term. The chairperson shall be selected from among the members specified in paragraphs (3) to (7), inclusive, of subdivision (a) of Section 32330.

32334. A majority of the voting members shall constitute a quorum for the transaction of the business of the conservancy. The board shall not transact the business of the conservancy if a quorum is not present at the time a vote is taken. A decision of the board requires an affirmative vote of six of the voting membership, and the vote is binding with respect to all matters acted on by the conservancy.

32336. The board shall adopt rules and procedures for the conduct of business by the conservancy.

32338. The board may establish advisory boards or committees, hold community meetings, and engage in public outreach.

32340. The board shall establish and maintain a headquarters office within the Delta. The conservancy may rent or own real and personal property and equipment pursuant to applicable statutes and regulations.

32342. The board shall determine the qualifications of, and shall appoint, an executive officer of the conservancy, who shall be exempt from civil service. The board shall employ other staff as necessary to execute the powers and functions provided for in this division.

32344. The board may enter into contracts with private entities and public agencies to procure consulting and other services necessary to achieve the purposes of this division.

32346. The conservancy's expenses for support and administration may be paid from the conservancy's operating budget and any other funding sources available to the conservancy.

32348. The board shall conduct business in accordance with the Bagley-Keene Open Meeting Act (Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code).

32350. The board shall hold its regular meetings within the Delta or the City of Rio Vista.

### Chapter 5. Powers, Duties, and Limitations

32360. (a) Except as specified in Section 32360.5, the jurisdiction and activities of the conservancy are limited to the Delta and Suisun Marsh.

- (b) (1) The Sacramento-San Joaquin Delta Conservancy Fund is hereby created in the State Treasury. Moneys in the fund shall be available, upon appropriation by the Legislature, only for the purposes of this division.
- (2) Funds provided for ecosystem restoration and enhancement shall be available for ecosystem restoration projects consistent with the conservancy's strategic plan adopted pursuant to Section 32376.
- (3) Funds may be allocated to a separate program within the conservancy for economic sustainability in the Delta. The economic sustainability plan adopted pursuant to Section 29759 shall be the basis for the program. Funds provided to the conservancy to implement ecosystem restoration projects pursuant to the Bay Delta Conservation Plan shall only be used for ecosystem restoration purposes.



32360.5. In furtherance of the conservancy's role in implementing the Delta Plan, the conservancy may take or fund an action outside the Delta and Suisun Marsh if the board makes all of the following findings:

- (a) The project implements the ecosystem goals of the Delta Plan.
- (b) The project is consistent with the requirements of any applicable state and federal permits.
- (c) The conservancy has given notice to and reviewed any comments received from affected local jurisdictions and the Delta Protection Commission.
- (d) The conservancy has given notice to and reviewed any comments received from any state conservancy where the project is located.
- (e) The project will provide significant benefits to the Delta.

32362. The conservancy may engage in partnerships with nonprofit organizations, local public agencies, and landowners.

32363. In implementing this division, the conservancy shall cooperate and consult with the city or county in which a grant is proposed to be expended or an interest in real property is proposed to be acquired, and shall, as necessary or appropriate, coordinate its efforts with other state agencies, in cooperation with the Secretary of the Natural Resources Agency. The conservancy shall, as necessary or appropriate, cooperate and consult with a public water system, levee, flood control, or drainage agency that owns or operates facilities, including lands appurtenant thereto, where a grant is proposed to be expended or an interest in land is proposed to be acquired.

32364. (a) The conservancy may require a grantee to enter into an agreement with the conservancy on terms and conditions specified by the conservancy.

- (b) The conservancy may require a cost-share or local funding requirement for a grant. The conservancy may make that cost-share or local funding requirement contingent upon the total amount of funding available, the fiscal resources of the applicant, or urgency of the project. The conservancy may waive cost-share requirements.

(c) The conservancy may fund or award grants for plans and feasibility studies consistent with its strategic plan or the Delta Plan.

(d) The conservancy may seek repayment or reimbursement of funds granted on terms and conditions it deems appropriate. The proceeds of repayment shall be deposited in the fund.

(e) The conservancy may require any funds that exceed the costs of eligible or approved projects or of acquisition to be returned to the conservancy, to be available for expenditure when appropriated by the Legislature.

32364.5. (a) The conservancy may provide grants and loans to state agencies, local public agencies, and nonprofit organizations to further the goals of the conservancy.

(b) An entity applying for a grant from the conservancy to acquire an interest in real property shall specify all of the following in the grant application:

- (1) The intended use of the property.
- (2) The manner in which the land will be managed.
- (3) How the cost of ongoing operations, maintenance, and management will be provided, including an analysis of the maintaining entity's financial capacity to support those ongoing costs.
- (4) Grantees shall demonstrate, where applicable, how they will provide payments in lieu of taxes, assessments, or charges otherwise due to local government.

32365. The conservancy may sue and be sued.

32366. (a) The conservancy may acquire from willing sellers or transferors interests in real property and improve, lease, or transfer interests in real property, in order to carry out the purposes of this division.

(b) The conservancy shall use conservation easements to accomplish ecosystem restoration whenever feasible.

32368. The conservancy may enter into an agreement with a public agency, nonprofit organization, or private entity for the construction, management, or maintenance of facilities authorized by the conservancy.

32370. The conservancy shall not exercise the power of eminent domain.

32372. (a) The conservancy may pursue and accept funds from various sources, including, but not limited to, federal, state, and local funds or grants, gifts, donations, bequests, devises, subventions, grants, rents, royalties, or other assistance and funds from public and private sources.

(b) The conservancy may accept fees levied by others.

(c) The conservancy may create and manage endowments.

(d) All funds received by the conservancy shall be deposited in the fund for expenditure for the purposes of this division.

32376. Within two years of hiring an executive officer, the board shall prepare and adopt a strategic plan to achieve the goals of the conservancy. The plan shall describe its interaction with local, regional, state, and federal land use, recreation, water and flood management, and habitat conservation and protection efforts within and adjacent to the Delta. The strategic plan shall establish priorities and criteria for projects and programs, based upon an assessment of program requirements, institutional capabilities, and funding needs throughout the Delta. The strategic plan shall be consistent with the Delta Plan, the Delta Protection Commission's resources management plan, the Central Valley Flood Protection Plan, the Suisun Marsh Preservation Act of 1977 (Division 19 (commencing with Section 29000)), and the Habitat Management, Preservation and Restoration Plan for the Suisun Marsh.

32378. (a) The conservancy may expend funds and award grants and loans to facilitate collaborative planning efforts and to develop projects and programs that are designed to further the purposes of this division.

(b) The conservancy may provide and make available technical information, expertise, and other nonfinancial assistance to public agencies, nonprofit organizations, and tribal organizations, to support program and project development and implementation.

32380. The conservancy may acquire water or water rights to support the goals of the conservancy.

32381. This division does not grant to the conservancy any of the following:

(a) The power of a city or county to regulate land use.

(b) The power to regulate any activities on land, except as the owner of an interest in the land, or pursuant to an agreement with, or a license or grant of management authority from, the owner of an interest in the land.

(c) The power over water rights held by others.

# Appendix C:

## Delta Conservancy Climate Change Policy

### RESOLUTION

WHEREAS Governor's Executive Order S-13-08 directed state agencies to consider a range of sea level rise scenarios for 2050 and 2100 to assess project vulnerability, reduce expected risks, and increase resiliency to sea level rise; and

WHEREAS the 2009 California Climate Adaptation Strategy called for all state agencies that are responsible for managing and regulating public health, infrastructure, or habitat that is subject to significant climate change to prepare agency-specific adaptation plans, guidance, or criteria; and

WHEREAS climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise, and increase temperatures, thereby posing a serious threat to: California's economy; the health and welfare of its population; and its natural resources; and

WHEREAS Assembly Bill 32 requires the State of California to reduce its greenhouse gas emissions to 1990 levels by 2020 and Executive Order S-3-05 requires the State to reduce greenhouse gas emissions 80 percent below 1990 levels by 2050.

NOW, THEREFORE, BE IT RESOLVED that it is the policy of the Sacramento-San Joaquin Delta Conservancy (Conservancy) to follow established state law and regulations regarding planning for climate change and reducing greenhouse gas emissions by developing a set of guidelines to assist the Conservancy in developing, establishing, and supporting projects that mitigate for climate change by reducing greenhouse gas emissions or have the capacity, or can increase the system's capacity, to adapt to the effects of climate change.

### CLIMATE CHANGE GUIDELINES FOR THE CONSERVANCY

The Conservancy is a primary state agency to implement ecosystem restoration in the Delta in collaboration and cooperation with local governments and a wide range of interested parties. The Conservancy Board of Directors developed the following climate change guidelines to assist

it in determining what could increase the Delta's resiliency to the effects of climate change within the context of the co-equal responsibilities of advancing environmental protection and the economic well being of Delta residents. Actions related to adapting to the effects of climate will be evaluated with the goal of promoting agriculture as a key industry in the Delta.

The Conservancy believes the regional economic and environmental health are linked to the Delta's vulnerability to potential climate change impacts, such as increased intensity of flooding or severity of drought, and that strengthening the Delta region's economy will help the Delta adapt to potential future conditions resulting from climate change.

The Conservancy is committed to establishing and maintaining partnerships with federal, state, and local governments, private business- and land-owners, and non-governmental organizations to develop and implement mitigation and adaptation strategies that address the needs and ability of the Conservancy to meet its mandates over time.

The Conservancy encourages projects that are resilient to climate change impacts. Such projects may be full-scale, pilot, or demonstration projects. Preferences will be given to projects containing effective or innovative adaptation measures and strategies that would minimize the effects of climate change. All projects should be consistent with state law and the Conservancy's enabling legislation and strategic plan.

The Conservancy understands that there are dissenting views on climate change and future climatic conditions are unknown. In the face of this uncertainty, the Conservancy will recognize the consensus of the scientific community and use the best available science in identifying climate change risks, adaptation strategies, and mitigation opportunities. The Conservancy understands that data continue to be collected and that knowledge about climate change is evolving; therefore, the Conservancy's Climate Change Guidelines will be updated periodically to integrate relevant new information and data.



### Carbon Management

The Conservancy sees carbon management as an integrated approach to reducing greenhouse gas emissions and climate change impacts in the Delta, using a variety of strategies, such as those listed below, but not limited to:

1. **Climate Change Research.** When appropriate and consistent with the Conservancy's enabling legislation, the Conservancy may support research projects targeted to increasing understanding of climate change impacts to the Delta (e.g. agricultural, economic, environmental), quantify carbon sequestration benefits of habitat enhancement and restoration projects, promote agricultural practices that reduce greenhouse gas emissions, and support projects that demonstrate the effectiveness of adaptive management strategies.
2. **Education, Outreach and Guidance.** The Conservancy will collaborate with others to provide up- to-date information and guidance on the latest climate change information pertinent to the Delta and best management practices for reducing greenhouse gas emissions. The Conservancy may collaborate with others to look for economic development opportunities in the Delta that result in reduced greenhouse gas emissions.
3. **Reduction/Avoidance.** Conservancy staff will work with applicants to identify, evaluate, and incorporate reasonable measures to reduce or avoid the greenhouse gas emissions of Conservancy-funded projects. The Conservancy will encourage use of best management practices and innovative designs that reduce or avoid greenhouse gas emissions and, as possible, will support developing these practices and designs through funding and other actions.
4. **Carbon Offset Credits.** Recognizing a carbon market could provide economic benefit to Delta residents, the Conservancy will explore the development of an offset credits program for farm carbon sequestration, which meets the requirements of the California Air Resources Board cap- and-trade regulation.

5. **Coordination.** Climate change adaptation strategies will be coordinated with the California Air Resources Board's AB 32 Scoping Plan process, when appropriate, as well as with other local, state, and national efforts to reduce greenhouse gas emissions.
6. **Staff Operations.** Where feasible, staff will attempt to reduce their work-related greenhouse gas emissions from travel, through the use of public transportation, carpooling, bicycling, fuel- efficient vehicles, clustering meetings and events, and using phone- and web-based conferencing technologies.

### Assessing Risk from Climate Change

Sea-Level Rise. To meet the requirements of Executive Order S-13-08, the Conservancy will consider the current range of sea-level rise (SLR) projections presented in the Interim Guidance Document (CO-CAT 2010) in assessing projects. When assessing potential impacts, the Conservancy will consider the project's timeline and the project's capacity to adapt to SLR. The Conservancy will avoid using SLR values for project planning that result in high risk of climate change impacts to public health and safety, public and private investments, the environment, agriculture, and the economy of the Delta. The Conservancy will use the Interim Guidance Document (CO-CAT 2010), which describes the amount of risk involved in a decision as dependent upon the consequences and the likelihood of realized impacts that may result from SLR. Realized impacts depend on the extent to which a project integrates an accurate projection of SLR.

Other Impacts from Climate Change. Potential climate change impacts in the Delta include, but are not limited to, increased air, soil and water temperature; loss of agricultural land; flooding; drought; severe storms; increased salinity; degraded water quality; declining crop yields; decreased biodiversity; new disease or pest invasion; invasive species; and loss of life. Not all Conservancy projects will be subject to climate change impacts; however, for those projects that have the potential to be impacted by climate change, the Conservancy will weigh the risk of climate change impacts to the project with the economic benefit of the project to the region. There may be cases where the known near-term benefits outweigh the unknown long-term risks to the project from climate change.

### Adaptation Strategies

The Conservancy will encourage programs and funded projects that are consistent with our co-equal responsibilities to advance environmental protection and the economic well-being of Delta residents and contain strategies, such as the ones listed in the project examples below, that can assist the Delta in adapting to climate change:

- a. Innovative projects pertaining to any of the Conservancy's mandates that incorporate features that are resilient to climate change impacts or increase the area's ability to adapt to potential impacts from climate change;
- b. Delta island subsidence reversal and land accretion (e.g., rice cultivation) projects to reduce the risk of levee failure;
- c. Projects that reduce flood impacts through levee maintenance and improvement and other measures to protect farmland and reduce damages to Conservancy investments and meet the Conservancy's legislative mandates;
- d. Projects that protect or restore habitats (e.g., floodplain, riparian) that can lessen flood flows to reduce flooding in the Delta;
- e. Projects that create buffer zones adjacent to tidal wetlands to allow tidal wetlands to move toward land in response to SLR;
- f. Projects that conserve, restore and enhance habitats and land that sequester carbon;
- g. Projects that incorporate and contribute to overall ecosystem health and viability through preserving or reestablishing movement corridors for terrestrial and aquatic species;
- h. Projects which incorporate efforts to prevent the introduction or spread of invasive species or control invasive species populations.

### Adaptive Management

Given the uncertainties associated with climate change related impacts on natural resources, restoration that can accommodate or adapt to climate change impacts is more likely to have longer-term success. A science-based adaptive management plan and long-term monitoring will be key components to successfully carrying out restoration

and economic development that can adapt to the affects of climate change. The Delta Reform Act requires that ecosystem restoration actions in the Delta include a formal adaptive management strategy (Water Code section 85308(f)). The Fifth Staff Draft Delta Plan describes a nine-step adaptive management framework (Delta Stewardship Council 2011). The three broad phases and their respective steps are described below:

- Plan (define/redefine the problem; establish goals and objectives; model linkages between objectives and proposed actions; select and evaluate research, pilot, or full-scale action);
- Do (design and implement action; design and implement monitoring plan); and
- Evaluate and Respond (analyze, synthesize, and evaluate; communicate current understanding; adapt).

Restoration projects and other applicable projects funded by the Conservancy shall contain an adaptive management plan consistent with the adaptive management framework described in the Delta Plan.

### SUPPORTING INFORMATION FOR RESOLUTION AND GUIDELINES

Over the last half of the 20th century, changes in the climate patterns of the western United States were observed that are attributed to greenhouse gas emissions from human activities (Barnett et al. 2008; IPCC 2007). These observed patterns are mirrored in California's changing hydrology and include increasing winter and spring air temperatures and extended growing seasons (Cayan et al. 2001), a greater proportion of precipitation falling as rain rather than snow (Knowles et al. 2006), less snowpack on mountain ranges (Mote 2003), and earlier snow-fed streamflows by 1 to 4 weeks (Stewart et al. 2005). The earlier runoff may also be accompanied by increases in the magnitude of peak runoff events and greater variability from year-to-year (Maurer 2007). These climatic variations are expected to continue into the 21st century even if greenhouse gases are substantially reduced, and will be experienced as larger and more sustained long-term trends (IPCC 2007).

### *The Greenhouse Effect and Climate Change*

The Earth's temperature is regulated by a process commonly known as the "greenhouse effect." In this process, heat emitted by the Earth's surface is absorbed by greenhouse gases (GHG) in the atmosphere. As the atmosphere warms, it in turn radiates a portion of this heat back to the surface. The most abundant GHG in the atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

Climate change is a shift in the typical weather pattern in a given region. Measurements of weather characteristics, such as temperature, precipitation, wind patterns, and storms can be used to assess changes in climate. The Earth's climate has always been, and still is, constantly changing. However, the climate change observed today differs from previous climate change in both its rate and its magnitude (California Environmental Protection Agency 2006).

The United Nations Intergovernmental Panel on Climate Change (IPCC) in the Fourth Assessment Report (2007) concluded that average temperatures in the Northern Hemisphere during the second half of the 20th century were likely higher than any other 50-year period in the last 1,300 years. The IPCC reported the atmospheric concentrations of carbon dioxide, methane, and nitrous oxide were higher than previously measured using the ice core record of the past 650,000 years. The IPCC also reported that the average rate of increase in atmospheric carbon dioxide from 1960 to 1999 was at least five times larger than over any other 40-year period during the two millennia before the industrial era (IPCC 2007). These results confirm for the IPCC that climate change is occurring and is the result of human activity.

There are both human and natural causes of climate change. The Earth's climate is influenced by changes in (1) atmospheric concentrations of GHG and aerosols, (2) solar radiation, and (3) land surface. The scientific standard to measure these changes and to understand how human and natural factors can contribute to warming or cooling is called "radiative forcing" (IPCC 2007). The IPCC Fourth Assessment Report analyzed radiative forcing from human and natural sources and concluded that: (1) most of the observed warming over the past 50 years is very likely due to human contributions to greenhouse gas concentrations; (2) carbon dioxide is the most important anthropogenic greenhouse gas; and (3) the primary sources of increased carbon dioxide concentrations are from fossil fuel use and land use change, while those of methane and nitrous oxide

are primarily due to agriculture. The IPCC further concluded that human activities have influenced ocean warming, continental-average temperatures, temperature extremes, and wind patterns.

### *Emission Scenarios*

While there is general agreement that the planet is warming, the degree and timing of this change is less certain. In order to predict future climate change, it is necessary to determine how much GHG could be emitted into the atmosphere in the future and the potential response of climatic, oceanic and terrestrial systems to increasing atmospheric concentration of these gases. To address this uncertainty, the IPCC Special Report on Emissions Scenarios (SRES) developed a range of scenarios for future GHG emissions based on different social, economic, demographic, environmental, and technological developments (IPCC 2000).

The A1 scenario is characterized by a global population that peaks in mid-century, rapid economic growth, and accelerated introduction of new and more efficient technologies. There are substantial reductions in regional differences in per capita income and increased cultural and social interactions. This scenario is further divided into three categories based on energy sources: fossil fuel intensive (A1F1) – the highest emission scenario, non-fossil fuel energy sources (A1T), and balance across all sources (A1B).

The A2 scenario, medium-high emission scenario, describes continuously increasing population growth, slow regional economic growth, slower technological growth than other scenarios. The underlying theme is preservation of local identities and self-reliance.

The B1 scenario, the lowest emission scenario, describes the same population growth rate as A1, but with rapid changes in economic bases that are less material intensive, and the introduction of clean and resource-efficient technologies. There is an emphasis on environmental sustainability and global solutions.

The B2 scenario depicts a future with continuously increasing global population, but at a rate lower than A2. There is an intermediate level of economic development and technological change is less rapid and more diverse than in the B1 and A1 scenarios. Local solutions to economic, social, and environmental sustainability are the emphasis of this scenario.



Projected warming for different scenario emissions are provided in the IPCC Fourth Assessment Report and are shown in Table 1. These include best estimates of projected warming and the likely range due to uncertainties associated with the emission scenarios. Global average temperatures

are projected to increase from 3.2 to 7.2 °F (1.8 – 4.0 °C) by the end of the 21st century. In the near-term, a warming of about 0.36 °F (0.2 °C) per decade is projected for the next 20 years over a range of SRES emission scenarios.

**Table 1. Projected Temperature Change**

SCENARIO	Temperature Change (Degrees at 2090-2099 relative to 1980-1999)			
	Best Estimate		Likely Range	
	°F	°C	°F	°C
<b>Constant Year 2000 Concentrations</b>	1.1	0.6	0.5-1.6	0.3-0.9
<b>B1</b>	3.2	1.8	2.0-5.2	1.1-2.9
<b>B2</b>	4.3	2.4	2.5-6.8	1.4-3.8
<b>A2</b>	6.1	3.4	3.6-9.7	2.0-5.4
<b>A1F1</b>	7.2	4.0	4.3-11.5	2.4-6.4

*Adapted from IPCC 2007.*

### Sea Level Rise

There are two major processes contributing to SLR. First, thermal expansion, where a warming atmosphere is causing the ocean to warm and water expands as it warms. Second, warmer temperatures are melting glaciers and continental ice sheets. Over the past century, sea levels have risen about 8 in (20 cm) along the California coast, similar to global mean sea level increases (Cayan et al. 2008a). The rate of global sea level rise has risen significantly in recent years and it is expected to continue to increase through the 21st century (IPCC 2007).

Future SLR due to thermal expansion and some components of melting ice can be projected. However, future contributions to SLR from the melting Greenland and Antarctic ice sheets could be significant, but current models are unable to satisfactorily quantify the rate of discharge from these ice sheets. Excluding these potentially significant contributions, global sea level is projected to rise 10 to 23 in (26 to 59 cm) by the end of this century under the highest emissions scenario (A1F1) and 7 to 15 in (18 to 38 cm) under the lower emissions scenario (B1) (IPCC 2007). If recent observations in ice discharge rates were to scale up in proportion to future global temperature change, the upper bound of sea level rise projections could increase by 4 to 8 in (10 to 20 cm) (IPCC 2007).

Another approach to projecting future SLR was developed using the calculated relationship between global mean temperature and sea level. This method was refined and applied to observed data of sea level and temperature for the years 1800 – 2000; the calculated values were found to very closely match the observed values (Vermeer and Rahmstorf 2009). Using the IPCC temperature projections over a range of climate scenarios from the Fourth Assessment Report, Vermeer and Rahmstorf (2009) estimate sea level to rise 32 to 70 in (81 to 179 cm) above 1990 levels by 2100. These projections do not include rapid changes in ice flow. It is not known if the ice-melt contributions to SLR contained in the last 120 years of observed data is sufficient to model future contributions. Another notable aspect of these projections is the time lag between emission reductions and a response in SLR, which suggests that emission reductions earlier in this century will be much more effective in slowing SLR than reductions later on.

### *Sea Level Rise and Extreme Events*

The Delta is subject to high river discharge and storm surge (water that is pushed inland by the force of the winds from a storm and results in higher water levels). These two factors can severely impact the levees that protect the Delta, as the frequency of large storms is directly related to the frequency of levee failures (Florsheim and Dettinger 2007). Increasing SLR exacerbates the impacts of high tides, storm surge, and freshwater floods (Cayan et. al. 2008a). Rising sea levels combined with tides, storms, or climatic fluctuations (such as El Niño-Southern Oscillation events) result in high sea level extremes and the frequency of these extremes may increase if storms become more frequent or severe as a result of climate change. Extreme sea levels can result in salinity intrusion into the Delta. The greatest impact to the Delta will occur when extreme sea levels and freshwater floods coincide. The increase in the time levees are stressed by high water levels will raise the likelihood of failure significantly (Cayan et al. 2008b). During the 1997-98 El Niño event, non-tide water levels in parts of the Delta stayed above 16 in (40 cm) for longer than 12 hours (Bromirski and Flick 2008). As the magnitude of future SLR increases, the frequency and magnitude of extreme events will escalate, as seen in the 20-fold increase in extreme tides since 1915 as measured at San Francisco (Cayan et. al. 2008a). Because processes in the Bay-Delta and global climate systems are complex and interconnected, climate changes effects are uncertain; surprising and compounded responses may occur (Dettinger and Culbertson 2008).

SLR is expected to increase pressure on levees over time which could lead to a greater risk of levee breaches or overtopping (Knowles 2010). Failure to plan for SLR with continued investments in Delta levee maintenance and improvements will have negative implications for managed wetlands behind levees, such as those in the Suisun Marsh. A portion of the marsh is already subtidal. However, the majority of the Suisun Marsh would be in a subtidal zone under a 39 in (100 cm) sea level rise (Knowles 2010). While wetlands have the ability to build up organic and mineral sediment (accretion), current inorganic sediment supply may not be sufficient to prevent the shallowest areas of Suisun Bay from getting deeper, even under a moderate rate of SLR (Ganju and Schoellhamer 2010). Absent significant accretion, the seasonal gravity draining of leveed wetlands, managed as waterfowl habitat, would become impossible (Knowles 2010).

Salinity in the Delta is expected to significantly increase due to SLR and island flooding (Lund et al. 2008). With SLR the ocean pushes its higher-salinity water farther into the Delta. A one foot SLR may mean low enough salinity in Delta water to continue irrigation during the growing season; however, higher levels of salinity in the southern Delta, especially in the fall, would significantly increase the costs of drinking water treatment. A three feet SLR may make this water unsuitable for irrigation.

### *Climate Change Impacts in the Delta*

In addition to SLR and extreme climatic events there are other potential impacts to the Delta from climate change. To better understand how future climate patterns may change, results from global climate models are “downscaled” to a finer resolution. This process helps correct some biases in areas like California that have complex landscapes that cannot be adequately represented at the coarse scale of global climate models (Cayan et al. 2008b).

Cayan et al. (2008b) evaluated different climate change model simulations from the IPCC Fourth Assessment to estimate future climate changes in California. In each simulation temperatures in California warm significantly by 2100, with increases from approximately +2.7 °F (1.5 °C) under the lower emissions B1 scenario to about +11 °F (6 °C) in the higher emissions A1F1 scenario. Human-induced climate changes are expected to progress rapidly (Dettinger and Culbertson 2008). This is illustrated by the projected changes in the likelihood of exceeding various annual-temperature increases in each decade of the 21st century, based on an ensemble of 84 projections from 12 climate models (Dettinger 2005). By the year 2030, almost no years will be cool compared to the 20th century. Projected consequences of these temperature increases include further declines of snow pack, reduced viability of many species of fruit trees, increased range of agricultural pests, decreasing hydropower generation, increased fire frequency, and greater concentrations of air pollutants (Cayan et al. 2008c).

In the Delta, similar changes may be expected. Cloern et al. (2011) simulated the B1 emission scenario using a model with low sensitivity to GHG emissions and the A2 emission scenario (medium-high emissions) with a medium-sensitivity model. In both scenarios, air temperatures in the Delta increase steadily, but the rate of change is more rapid in the A2 scenario than in the B1 scenario. Under these models,

precipitation continuously declines through the end of the century in the A2 scenario. While there is no obvious trend in precipitation change in the B2 scenario, this projection shows large variation from year-to-year (interannual variability), which includes years of extreme high precipitation and multi-year drought. As with precipitation, unimpaired runoff and snowmelt declines in the A2 scenario. Runoff displays the same large interannual variability as precipitation in the B2 scenario. As with state-wide patterns, there is a shift toward runoff occurring earlier in the year.

These climate and hydrologic projections were used to assess how habitat quality will be altered by climate change. Water temperatures in the Delta will increase steadily in both scenarios, with more rapid increases in the A2 scenario. Lethal temperatures for both Chinook salmon and Delta smelt will occur more frequently and the timing of spring spawning temperatures will shift to earlier in the year (Cloern et al. 2011, Wagner et al. 2011). Managing for these increased temperatures will be more challenging as decreasing snowmelt reduces the amount of cold water runoff available in upstream reservoirs. In addition to temperature changes, aquatic species will be affected by the change in water quantity. In the A2 scenario, the frequency of spring floods with the duration needed for successful spawning and rearing of Sacramento splittail decreases (Cloern et al. 2011).

Another indicator of habitat quality, suspended sediment supply, is projected to decrease in both future climate scenarios, which will increase the vulnerability of tidal marshes and mudflats to SLR (Cloern et al. 2011). Decreased sediment supply also has implications for native species, such as the Delta smelt, that are adapted to turbid waters. Conditions for nonnative species will also become more favorable as temperatures increase.

Agriculture will be affected by the consequences of climate change as well. Irrigation demand will increase to meet a higher evaporative demand, the occurrence of agricultural pests will increase, and rising temperatures will have a direct effect on commodity quality and quantity (Hayhoe et al. 2004). Dairy production in California is projected to decrease by as much as 22% by the end of the century under the high emission scenario. Wine grape quality is affected by extreme temperatures during the ripening period. Across the range of emission scenarios, wine grapes are projected to ripen one to two months earlier and at a higher temperature, leading to degraded quality (Hayhoe et al. 2004).

### *Carbon Emissions in the Delta*

Agricultural land use practices in the Delta have oxidized more than 2 million acre-feet of peat soils collectively over the past century. This has led to subsidence down to 20-25 feet below sea level on many islands in the Delta (Mount and Twiss 2005). These soils continue to oxidize from current agricultural land use practices, emitting about 4.4 to 5.3 million tons of carbon dioxide annually. This represents approximately 1% of California's total emissions, with California being the twelfth-largest emitter of carbon in the world (Merrill et al. 2010). The amount of peat available for oxidation has been and will continue to decrease over time. Peat soils have already been completely removed in the southern Delta and portions of the eastern Delta, but are still present in the central, western, and northern Delta and, if farmed, will continue to oxidize and emit carbon dioxide (Lund et al. 2007).

While the Delta is a source of carbon emissions, it has the potential to sequester carbon as well. Research conducted in the Delta over the past 15 years shows that native tule wetlands have the ability to capture carbon at very high rates and, in the process, accrete soil that reverses subsidence (Merrill et al. 2010). Executive Order S-3-05 calls for California to reduce GHG emission to 80% below 1990 levels by 2050. Projects that sequester carbon in the Delta, like carbon capture wetland farms, can contribute toward the State reaching this goal and have the additional benefit of reversing subsidence and reducing pressure on existing levees.

## **CALIFORNIA LEGISLATION AND POLICIES**

The State of California has adopted a wide variety of laws and policies targeted at reducing GHG emissions and addressing the potential impacts from SLR. Below is a summary of key climate change laws and policies pertinent to the Delta.

### *Executive Order S-3-05*

This order calls for the State to reduce GHG emissions to 1990 levels by 2020 and to reduce GHG emissions to 80 percent below 1990 levels by 2050. Additionally, this order established the Climate Action Team (CAT) for State agencies. The CAT is chaired by the Secretary of the California Environmental Protection Agency.



### *Assembly Bill 32 (2006)*

The California Global Warming Solutions Act of 2006 (AB 32) set the 2020 GHG emission reduction goal into law. It directed the Air Resource Board (ARB) to develop a scoping plan to identify how to best reach the 2020 limit. AB 32 also directed the ARB to adopt regulations requiring the mandatory reporting of GHG emissions and to identify and adopt regulations for discrete early actions to reduce GHG that could be enforceable on or before January 1, 2010.

On October 20, 2011, the ARB adopted the final cap-and-trade regulation. Rules for quantifying offset credits have been developed for livestock projects, ozone depleting substances projects, urban forest projects, and U.S. forest projects.

### *AB 32 Climate Change Scoping Plan (2008)*

This plan outlines actions to reach the GHG reduction goals required in AB 32. Several strategies pertinent to agriculture are encouraging investments in methane capture systems at dairies and increasing carbon sequestration.

### *Senate Bill 97 (2007)*

SB 97 required the Governor's Office of Planning and Research to develop recommended amendments to State CEQA Guidelines for addressing GHG emissions. These amendments were to provide guidance on how to determine significance and mitigate the effects of GHG emissions. The CEQA Guidelines were amended in March 2010 to incorporate these provisions.

### *Executive Order S-13-08*

Executive Order S-13-08 calls for the State to implement a number of actions to reduce vulnerability to climate change. This order directs the California Natural Resources Agency to request that the National Academy of Sciences convene an independent panel to develop a Sea Level Rise Assessment Report. Prior to the release of this report, all State agencies shall consider a range of SLR scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risk and increase resiliency to sea level rise. Additionally, this order directs the California Natural Resources Agency, through the CAT, to develop a state Climate Adaptation Strategy.

### *2009 California Climate Adaptation Strategy*

This document, required by EO S-13-08, summarizes the best known science on climate change impacts to California and outlines strategies to increase California's resiliency from the impacts from climate change. Adaptive and mitigation strategies are seen as complementary and equally necessary approaches. One key recommendation is for all State agencies responsible for managing and regulating public health, infrastructure or habitat subject to significant climate change should prepare agency- specific adaptation plans, guidance, or criteria by September 2010.

### *Amendments to the CEQA Guidelines (2010)*

On March 18, 2010, the Natural Resource Agency adopted CEQA Guidelines Amendments, implementing SB 97. The Governor's Office of Planning and Research summarized the amendments as follows:

- "Lead agencies must analyze the greenhouse gas emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions.
- When a project's greenhouse gas emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions.
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change.
- Lead agencies may significantly streamline the analysis of greenhouse gases on a project level by using a programmatic greenhouse gas emissions reduction plan meeting certain criteria.
- CEQA mandates analysis of a proposed project's potential energy use (including transportation- related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives."

### *State of California Sea-Level Rise Interim Guidance Document (2010)*

This document was developed by the Sea-Level Rise Task Force of the Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT). It provides guidance for incorporating SLR projections into planning and decision making for projects in California and will

be regularly revised to incorporate the latest scientific understanding on climate change and SLR. The Interim Guidance Document recommends using the range of SLR values shown in Table 2. They note that these projections do not account for catastrophic ice melt and, therefore, may underestimate actual SLR. After 2050, the three different SLR values are based on

**Table 2. Sea-Level Rise Projections using 2000 as the Baseline**

Year		Average of Models	Range of Models
<b>2030</b>		7 in (18 cm)	5-8in (13-21 cm)
<b>2050</b>		14 in (36 cm)	10-17 in (26-43 cm)
<b>2070</b>	Low	23 in (59 cm)	17-27 in (43-70 cm)
	Medium	24 in (62 cm)	18-29 in (46-74 cm)
	High	27 in (69 cm)	20-32 in (51-81 cm)
<b>2100</b>	Low	40 in (101 cm)	31-50 in (78-128 cm)
	Medium	47 in (121 cm)	37-60 in (95-152 cm)
	High	55 in (140 cm)	43-69 in (110-176 cm)

Source: *State of California Sea-Level Rise Interim Guidance Document (2010)*

Other recommendations include consider the project timeframe, adaptive capacity of the project, and risk tolerance when selecting SLR estimates; coordinate with other state agencies when selecting values of SLR and, where appropriate and feasible, use the same projections of SLR; future SLR projections should not be based on linear extrapolation of historic sea level observations; consider trends in relative local mean sea level; consider storms and other extreme events; and consider changing shorelines.

### *Resolution of the Ocean Protection Council on Sea-Level Rise (2011)*

This resolution states that State agencies should incorporate consideration of the risk posed by SLR into all decisions regarding areas or programs potential affected by SLR. State agencies should follow the recommendations described in the Interim Guidance Document developed by the CO-CAT and any subsequent guidance documents. State agencies should assess potential impacts and vulnerabilities over a range of SLR projections, including analysis of the highest SLR values, and should avoid making decisions based on SLR values that would result in high risk.

## ACRONYMS

CAT	Climate Action Team
CO-CAT	Coastal and Ocean Working Group of the California Climate Action Team
GHG	Greenhouse Gases
IPCC	Intergovernmental Panel on Climate Change
SLR	Sea Level Rise
SRES	Special Report on Emissions Scenarios

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# Appendix D:

## Input for Strategic Plan Development

The following people generously provided input for development of the preliminary draft Strategic Plan that was posted on the Conservancy's web page for comments.

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Rich Radmacher, South Sacramento County Habitat  
Conservation Plan

Mike Reagan, Solano County Supervisor, District 5

Brooke Schlenker, Sacramento District Army Corps  
of Engineers

Jim Townsend, East Bay Regional Park District

Russell Van Loben Sels, Sacramento County Farm Bureau

John Veitch, Contra Costa County Farm Bureau

John Viano, Contra Costa County Farm Bureau

Ken Vogel, San Joaquin County Supervisor, District 4

Michael Winter, Sacramento County Department of  
Planning and Community Development

Eddie Woodruff, Delta Conservancy Board Member

Jimmie Yee, Sacramento County Supervisor, District 2

John Young, Yolo County Agricultural Commissioner

Tom Zuckerman, Central Delta Water Agency

# Endnotes

- 1 This is a partial list only. A comprehensive review of the Delta Conservancy's legislation can be found in Section II of this plan.
- 2 The other voting members are: two public members appointed by the Governor, confirmed by the Senate; one public member appointed by the Senate Committee on Rules; one public member appointed by the Speaker of the Assembly; the Secretary of Resources or a designee; and the Director of Finance or a designee.
- 3 See Figure 1: Sacramento-San Joaquin Delta Conservancy Service Area Map, p. 16. Because the Delta Conservancy's service area includes both the statutory Delta and Suisun Marsh, this plan occasionally combines the two in referring to "the Delta" or "the Delta ecosystem." These references are solely for the sake of convenience.
- 4 The Conservancy's strategic plan is required by law to be consistent with the RMP. Public Resources Code §32376.
- 5 Based on information presented in the Delta Protection Commission's Economic Sustainability Plan, pp. 112, 147, 180. The \$3 billion total combines estimates for the five Delta counties and the Delta region. An estimate of statewide economic impact from the Delta would be larger.
- 6 SBX7 1 was part of a package of water bills enacted by the Legislature in November 2009. Section 37 of that statute is the Sacramento-San Joaquin Delta Conservancy Act (the "Delta Conservancy Act"), codified at §32300 *et seq.* of the Public Resources Code. The text of the Delta Conservancy Act can be found in Appendix B.
- 7 All references are to the Public Resources Code (PRC) unless otherwise indicated.
- 8 This formulation is not part of the statute creating the Conservancy and should not be confused with the State's policy of co-equal goals for the Delta: providing a more reliable water supply and protecting, restoring, and enhancing the Delta ecosystem. Water Code §85054.
- 9 Two of the plans are currently under development: the Delta Plan and the CVFPP. This Strategic Plan relies on the most recent available versions, including the Final Staff Draft Delta Plan dated May 14, 2012 ("Draft Delta Plan"). As the plans are completed and take effect the Conservancy will review this Strategic Plan for consistency and make appropriate modifications.
- 10 This is the date of the Final Environmental Impact Report/Environmental Impact Statement.
- 11 Public Resources Code §32376
- 12 Draft Delta Plan, p. 148.
- 13 According to the Working Draft dated November 19, 2010
- 14 Water Code §85320(a). The statute also describes a set of conditions under which the Council "shall" incorporate the BDCP into the Delta Plan. §85320(e).
- 15 Draft Delta Plan p. 55
- 16 References are to specific policies contained in different sections of the RMP. The document is available online at: <http://www.delta.ca.gov/Land%20Use%20and%20Resource%20Management%20Plan%20for%20the%20Prim.htm>. (accessed April 26, 2012)
- 17 2012 CVFPP Public Draft, December 2011 pp. 3-21, 3-22.
- 18 Fish and Game Code §§2050-2069
- 19 Version dated January 19, 2012. Parts of ESP may be included in the Delta Plan at the discretion of the Delta Stewardship Council.
- 20 ESP p. 276
- 21 Draft Delta Plan, pp. 291-2
- 22 Draft Delta Plan, Appendix N, Table N-1
- 23 The Legislature did not identify restoration targets for the Conservancy or authorize the Conservancy to determine when restoration in the Delta is "complete" for purposes of achieving the state's policy goals.
- 24 Tracks definition in the Delta Protection Commission's ESP, p. 14.













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